**ACADEMIC CALENDAR**

**1983-1984**

**FALL SEMESTER—1983**

(To Be Announced)

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 15</td>
<td>Friday</td>
<td>Pharmacy Externship Begins</td>
</tr>
<tr>
<td>August 15</td>
<td>Monday</td>
<td>Holiday Assumption</td>
</tr>
<tr>
<td>August 24</td>
<td>Monday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>August 25</td>
<td>Thursday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>August 26</td>
<td>Friday</td>
<td>Final Registration</td>
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<tr>
<td>August 27</td>
<td>Saturday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>August 27</td>
<td>Saturday</td>
<td>Latest Date to Register without Late Fee</td>
</tr>
<tr>
<td>August 29</td>
<td>Monday</td>
<td>Fall Semester Begins</td>
</tr>
<tr>
<td>September 5</td>
<td>Monday</td>
<td>Latest Date to Register and for Change of Schedule</td>
</tr>
<tr>
<td>September 6</td>
<td>Tuesday</td>
<td>Latest Date to Declare Pass/Fail No remission of tuition for reduced class schedule obtained after this date</td>
</tr>
<tr>
<td>September 10</td>
<td>Saturday</td>
<td>Pharmacy Externship Ends</td>
</tr>
<tr>
<td>September 16</td>
<td>Friday</td>
<td>Latest Date for 80% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>September 17</td>
<td>Saturday</td>
<td>Latest Date for 40% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>September 24</td>
<td>Saturday</td>
<td>Latest Date for 20% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>October 14</td>
<td>Friday</td>
<td>Latest Date for Undergraduates to remove Temporary I Grades from Spring Semester and Summer Session</td>
</tr>
<tr>
<td>October 21</td>
<td>Friday</td>
<td>Latest Date to Submit Mid-Term Grades</td>
</tr>
<tr>
<td>October 21</td>
<td>Friday</td>
<td>Latest Date for December 83 Graduates to Apply for Graduation</td>
</tr>
<tr>
<td>October 25</td>
<td>Friday</td>
<td>Latest Date for Undergraduate I Grade Removal Grades</td>
</tr>
<tr>
<td>October 28</td>
<td>Friday</td>
<td>Latest Date for Undergraduates other than First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>November 1</td>
<td>Tuesday</td>
<td>Holiday All Saints Day</td>
</tr>
<tr>
<td>November 15</td>
<td>Tuesday</td>
<td>Pre-Registration for Spring Semester Begins Other dates Nov 16 17 18 19 28 29 30 (W H F S M T W)</td>
</tr>
<tr>
<td>November 19</td>
<td>Saturday</td>
<td>Last Class Day before Thanksgiving Holidays</td>
</tr>
<tr>
<td>November 28</td>
<td>Monday</td>
<td>First Class Day after Thanksgiving Holidays</td>
</tr>
<tr>
<td>November 30</td>
<td>Monday</td>
<td>Latest Date for Spring Semester Pre-Registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>December 5</td>
<td>Monday</td>
<td>Latest Date for December 83 Graduates to submit Approved Theses and Take Comprehensives</td>
</tr>
<tr>
<td>December 7</td>
<td>Wednesday</td>
<td>December 7 will follow the Thursday Class Day Schedule</td>
</tr>
<tr>
<td>December 8</td>
<td>Thursday</td>
<td>Holiday Immaculate Conception</td>
</tr>
<tr>
<td>December 9</td>
<td>Friday</td>
<td>Latest Date for First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>December 15</td>
<td>Thursday</td>
<td>Final Examinations Begin Other dates Dec 16 17 19 20 21 (F S M T W)</td>
</tr>
<tr>
<td>December 21</td>
<td>Wednesday</td>
<td>Fall Semester Ends Latest Date for December graduating students to pay account and complete degrees</td>
</tr>
<tr>
<td>December 21</td>
<td>Wednesday</td>
<td>Latest Date for Graduate Students to Remove I Grades from the Spring Semester and Summer Session</td>
</tr>
</tbody>
</table>

**SPRING SEMESTER—1984**

(To Be Announced)

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 30</td>
<td>Thursday</td>
<td>Latest Date for Spring Semester Pre-Registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>January 5</td>
<td>Thursday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>January 6</td>
<td>Friday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>January 7</td>
<td>Saturday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>January 7</td>
<td>Saturday</td>
<td>Latest Date to Register without Late Fee</td>
</tr>
<tr>
<td>January 9</td>
<td>Monday</td>
<td>Spring Semester Begins</td>
</tr>
<tr>
<td>January 14</td>
<td>Saturday</td>
<td>Latest Date to Register and for Change of Schedule</td>
</tr>
<tr>
<td>January 20</td>
<td>Friday</td>
<td>Latest Date to Declare Pass/Fail No remission of tuition for a reduced class schedule obtained after this date</td>
</tr>
<tr>
<td>January 21</td>
<td>Saturday</td>
<td>Latest Date for May 84 Graduates to Apply for Graduation</td>
</tr>
<tr>
<td>January 27</td>
<td>Friday</td>
<td>Latest Date for 80% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>January 28</td>
<td>Saturday</td>
<td>Latest Date for 40% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>February 4</td>
<td>Saturday</td>
<td>Latest Date for 20% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>February 13</td>
<td>Monday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>February 14</td>
<td>Tuesday</td>
<td>Pharmacy V Externship Ends</td>
</tr>
<tr>
<td>February 24</td>
<td>Friday</td>
<td>Due Date for Instructors to Submit I Grade Removal Grades for the Fall 83 Semester</td>
</tr>
<tr>
<td>March 2</td>
<td>Friday</td>
<td>Latest Date for Reporting Mid-Term Grades</td>
</tr>
<tr>
<td>March 9</td>
<td>Friday</td>
<td>Latest Date for Undergraduates other than First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>March 16</td>
<td>Friday</td>
<td>Latest Date for May 84 Graduates to Submit Approved Thesis and Take Comprehensives</td>
</tr>
<tr>
<td>April 5</td>
<td>Thursday</td>
<td>Pre-Registration for 84 Fall Semester Begins Other dates April 5-13 incl (F S M T W H)</td>
</tr>
<tr>
<td>April 13</td>
<td>Friday</td>
<td>Latest Date for First Semester Freshmen to Withdraw with W Grade</td>
</tr>
<tr>
<td>April 13</td>
<td>Friday</td>
<td>Last Class Day before Easter Holidays</td>
</tr>
<tr>
<td>April 17</td>
<td>Tuesday</td>
<td>First Class Day after Easter Holidays</td>
</tr>
<tr>
<td>April 25</td>
<td>Wednesday</td>
<td>Final Examinations Begin Other dates April 26 27 28 29 30 May 1 (W H F S M T)</td>
</tr>
<tr>
<td>May 1</td>
<td>Tuesday</td>
<td>Latest Date for Graduate Students to Remove 83 Fall Semester I Grades</td>
</tr>
<tr>
<td>May 1</td>
<td>Tuesday</td>
<td>Spring Semester Ends Latest Date for May 84 Graduating Students to complete Degrees</td>
</tr>
<tr>
<td>May 4</td>
<td>Friday</td>
<td>University Convocation and Honors Day</td>
</tr>
<tr>
<td>May 4</td>
<td>Friday</td>
<td>Graduation Mass</td>
</tr>
<tr>
<td>May 5</td>
<td>Saturday</td>
<td>Commencement Exercises</td>
</tr>
<tr>
<td>May 31</td>
<td>Thursday</td>
<td>Holiday Ascension Day</td>
</tr>
<tr>
<td>July 13</td>
<td>Friday</td>
<td>Latest Date for Fall Semester Pre-Registration with Pay-By-Mail Option</td>
</tr>
</tbody>
</table>
### FALL SEMESTER—1985

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 19</td>
<td>Friday</td>
<td>Latest Date for Fall Semester Pre-registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>August 15</td>
<td>Thursday</td>
<td>Holiday Assumption</td>
</tr>
<tr>
<td>August 21</td>
<td>Wednesday</td>
<td>Final Registration *</td>
</tr>
<tr>
<td>August 22</td>
<td>Thursday</td>
<td>Final Registration *</td>
</tr>
<tr>
<td>August 23</td>
<td>Friday</td>
<td>Final Registration</td>
</tr>
<tr>
<td>August 24</td>
<td>Saturday</td>
<td>Latest Date to Cancel Registration without Penalty</td>
</tr>
<tr>
<td>August 24</td>
<td>Saturday</td>
<td>Latest Date to Register without Late Fee</td>
</tr>
<tr>
<td>August 26</td>
<td>Monday</td>
<td>Semester Begins</td>
</tr>
<tr>
<td>September 2</td>
<td>Monday</td>
<td>Holiday Labor Day</td>
</tr>
<tr>
<td>September 3</td>
<td>Tuesday</td>
<td>Latest Date to Register</td>
</tr>
<tr>
<td>July 19</td>
<td>Friday</td>
<td>Latest Date for Change of Class Schedule</td>
</tr>
<tr>
<td>August 21</td>
<td>Wednesday</td>
<td>Latest Date to Declare Pass/Fail</td>
</tr>
<tr>
<td>August 22</td>
<td>Thursday</td>
<td>No Refund After this Date for Credits Dropped</td>
</tr>
<tr>
<td>August 23</td>
<td>Friday</td>
<td>Latest Date for 80% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>October 8</td>
<td>Tuesday</td>
<td>Latest Date to Submit Mid-term Grades</td>
</tr>
<tr>
<td>October 11</td>
<td>Friday</td>
<td>Latest Date to Submit Undergraduate I Grade Removal Grades</td>
</tr>
<tr>
<td>October 25</td>
<td>Friday</td>
<td>Latest Date to December Prospective Graduates to Submit Thesis Outline and Schedule Comprehensives</td>
</tr>
<tr>
<td>November 1</td>
<td>Friday</td>
<td>Latest Date for Undergraduates Other than First Semester Freshmen to Withdraw with W Grade</td>
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<tr>
<td>November 14</td>
<td>Thursday</td>
<td>Spring Semester Pre-registration Begins * Other Dates Nov 15 16 18 19 20 21 22 (F S M T W H F)</td>
</tr>
<tr>
<td>November 22</td>
<td>Friday</td>
<td>Latest Date for 1986 Spring Semester Pre-registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>November 22</td>
<td>Saturday</td>
<td>Last Class Day Before Thanksgiving Holidays</td>
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<td>December 11</td>
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<td>Reading Day</td>
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<td>December 20</td>
<td>Friday</td>
<td>Semester Ends Latest Date for Graduating Students to Complete Degrees and Pay Accounts</td>
</tr>
<tr>
<td>December 20</td>
<td>Friday</td>
<td>Latest Date for Graduate Students to Complete I Graded Courses of the 1984 Fall Semester</td>
</tr>
<tr>
<td>December 21</td>
<td>Saturday</td>
<td>Holiday Christmas Recess Begins</td>
</tr>
</tbody>
</table>

*See Semester Class Directory for Time Schedule

### SPRING SEMESTER—1986

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
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<td>November 22</td>
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<td>Thursday</td>
<td>Final Registration *</td>
</tr>
<tr>
<td>January 10</td>
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</tr>
<tr>
<td>January 13</td>
<td>Monday</td>
<td>Semester Begins</td>
</tr>
<tr>
<td>January 18</td>
<td>Saturday</td>
<td>Latest Date to Register</td>
</tr>
<tr>
<td>January 18</td>
<td>Saturday</td>
<td>Latest Date for Change of Class Schedule</td>
</tr>
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<td>January 18</td>
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<td>Latest Date for 80% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>January 27</td>
<td>Monday</td>
<td>Latest Date for May Prospective Graduates to Submit Thesis Outline and Schedule Comprehensives</td>
</tr>
<tr>
<td>January 31</td>
<td>Friday</td>
<td>Latest Date for 40% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>February 8</td>
<td>Saturday</td>
<td>Latest Date for 20% Tuition Remission for TOTAL WITHDRAWAL from the University</td>
</tr>
<tr>
<td>February 28</td>
<td>Saturday</td>
<td>Latest Date for Undergraduates to Complete I Graded Courses of the 1985 Fall Semester 1 Graded Courses Not Completed by this date receive the Permanent Grade of F</td>
</tr>
<tr>
<td>March 7</td>
<td>Friday</td>
<td>Latest Date to Submit Midterm Grades</td>
</tr>
<tr>
<td>March 7</td>
<td>Friday</td>
<td>Due Date for Instructors to Submit Undergraduate I Grade Removal Grades</td>
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<td>March 22</td>
<td>Saturday</td>
<td>Fall Class Day Before Easter Holidays</td>
</tr>
<tr>
<td>March 31</td>
<td>Monday</td>
<td>First Class Day After Easter Holidays</td>
</tr>
<tr>
<td>April 3</td>
<td>Thursday</td>
<td>Latest Date for Undergraduates to Complete I Graded Courses of the 1985 Fall Semester</td>
</tr>
<tr>
<td>April 7</td>
<td>Monday</td>
<td>Latest Date for May Prospective Graduates to Submit Approved Thesis to School, Office and to Take Comprehensives</td>
</tr>
<tr>
<td>April 14</td>
<td>Monday</td>
<td>Latest Date for May Graduates to Pay Accounts</td>
</tr>
<tr>
<td>April 25</td>
<td>Friday</td>
<td>Latest Date for First Semester Freshmen to withdraw with W Grades</td>
</tr>
<tr>
<td>April 28</td>
<td>Monday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>April 29</td>
<td>Tuesday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>April 30</td>
<td>Wednesday</td>
<td>Final Examinations Begin Other Dates May 1 2 3 5 6 (H F S M T)</td>
</tr>
<tr>
<td>May 6</td>
<td>Tuesday</td>
<td>Semester Ends Latest Date for Graduating Students to Complete Degrees</td>
</tr>
<tr>
<td>May 6</td>
<td>Tuesday</td>
<td>Latest Date for Graduate Students to Complete I Graded Courses of the 1985 Spring Semester</td>
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<td>May 8</td>
<td>Thursday</td>
<td>Holiday Ascension Day</td>
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<td>University Convocation and Honors Day</td>
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<td>Friday</td>
<td>Graduation Mass</td>
</tr>
<tr>
<td>May 10</td>
<td>Saturday</td>
<td>Commencement</td>
</tr>
<tr>
<td>May 26</td>
<td>Monday</td>
<td>Holiday Memorial Day</td>
</tr>
<tr>
<td>July 4</td>
<td>Friday</td>
<td>Holiday Independence Day</td>
</tr>
<tr>
<td>July 14</td>
<td>Wednesday</td>
<td>Latest Date for 1986 Fall Semester Pre-Registration with Pay-By-Mail Option</td>
</tr>
<tr>
<td>August 15</td>
<td>Friday</td>
<td>Holiday Assumption</td>
</tr>
</tbody>
</table>

*See Semester Registration Schedule for Other Dates and Times*
HISTORY

Duquesne University first opened its doors as the Pittsburgh Catholic College of the Holy Ghost in October 1878 with an enrollment of 40 students and a faculty of seven. The school grew rapidly in its first years until it moved from its original location on Wylie Avenue in the city’s Uptown section to its present site a scenic 39-acre hilltop area called The Bluff which overlooks downtown Pittsburgh. By 1911 the school had achieved university status at which time the name Duquesne University of the Holy Ghost was adopted in honor of the 18th century governor general of French Canada the Marquis de Duquesne who first brought Catholic services to Pittsburgh while it was under French dominion. Duquesne’s great period of student growth after World War II along with the necessity of refurbishing a make-shift physical plant led the University to begin an ambitious program of planned physical expansion and modernization in 1950. Now in the enviable position of having completed most of its physical development needs for the foreseeable future the University is a modern attractive and highly functional educational facility which has more than tripled from its early 12 acres to its present self-enclosed 39-acre campus site.

Today, Duquesne University is not only one of the leading private institutions in Pennsylvania but also one of several major private Catholic urban universities in the United States. The University has over 6,000 students enrolled in its eight schools. College of Liberal Arts and Sciences (1878) Graduate School of Liberal Arts and Sciences (1929) Law School (1878) Medical School (1905) School of Business and Administration (1925) School of Education (1928) School of Engineering (1917) School of Nursing (1925) School of Pharmacy (1917) School of Theology (1930) School of Pharmacy (1917) School of Theology (1930) School of Law (1925)

The mission of Duquesne University’s founders, the Holy Ghost Congregation has always included service to peoples outside of the United States. Duquesne University also is committed to providing an educational environment which recognizes cultural and national pluralism. Duquesne welcomes qualified students from throughout the world and encourages its students and faculty to take advantage of opportunities to study and teach abroad.

The University believes that the sharing of the multiple traditions and mores of societies is an invaluable element in the educational process. In a world that is growing ever smaller it is imperative that Duquesne reach out to peoples of different cultures to afford them the opportunity to acquire educational experiences not otherwise available to them. Interaction among international and American faculty and students will enrich all and enhance their ability to be better citizens of our shared world.

Duquesne University asserts its commitment to developing and maintaining programs, services and practices which promote and express respect for persons of diverse cultures and backgrounds and which provide educational bridges linking the peoples of the world.

THE UNIVERSITY SETTING

Located adjacent to downtown Pittsburgh, Duquesne University’s modern hilltop campus is readily accessible to the business, entertainment, and shopping centers of the city while still offering students the privacy and peace of its own self-enclosed 39-acre site. Long noted as one of the world’s greatest steel-producing centers Pittsburgh combines the features of urban living with many of the charms and personal...
characteristics of a much smaller town. The third largest corporate headquarters center in the U.S. behind New York and Chicago, Pittsburgh was also shown in a recent survey of urban life to be the fourth most desirable metropolitan area for overall quality of life in the U.S. to most visitors and new residents who come to the city and are attracted by the old Smokey City image they soon learn that the Pittsburgh which emerged from its nationally acclaimed Renaissance redevelopment program is not only a city of clean air and stress free neighborhoods and a bustling economy but that Pittsburgh more than any other American city has developed a strong civic identity and sense of pride in its rebirth as a modern urban community.

Students from Duquesne, the other colleges and universities in the city can choose from a wide range of cultural events and institutions. The world-renowned Pittsburgh Symphony Orchestra, Pittsburgh Opera, Pittsburgh Ballet Theatre all perform regularly in the elegant Heinz Hall for the Performing Arts. The theatregoer can choose from productions of the Pittsburgh Public Theatre local college drama departments and programs and a wide variety of summer and after-dinner club theatres. In the summer the American Wind Symphony offers open-air concerts on Pittsburgh's riversides. Other seasonal events include the Three Rivers and Shadyside arts festivals and the International Folk Festival. These and other prestigious events which draw national attention.

Duquesne students can visit such points of interest as Highland Park Zoo, Carnegie Museum of Art and History, Scenic Gallery, the Conservatory-Axayi Buhl Planatarium, the Pittsburgh History and Landmarks Museum, Duquesne Incline and Pitts Conservatory. Directly across the river from campus is Mount Washington Pittsburgh's highest point which offers a spectacular view of the city and its surroundings particularly at night. Market Square is a main dining area in the heart of downtown Pittsburgh and the Oakland Shadyside area in the eastern end of the city are two of the major entertainment and nightlife centers. The success of the various professional and major college sports teams has won for Pittsburgh the title of City of Champions. The 1971 and 1979 World Champion Pirates and the four-time Super Bowl Champion Steelers played in the old University Library building. The Penguins (National Hockey League) Spirit (Major Indoor Soccer League) and Duquesne Dukes nationally known basketball team the 1977 Eastern Eight champions all perform in the nearby Civic Arena which is one of the largest indoor sports arenas in the United States and the only one in the world with a retractable dome. Facilities for such participatory sports as tennis, golf, running, hiking, skiing, and many others are available throughout the Pittsburgh area.

PHYSICAL FACILITIES

The Administration Building Old Main was the first building constructed on the Duquesne campus dedicated in 1884. Recently renovated it houses the Executive Offices of the University Office of Administration, Campus Ministry Business Offices Testing Bureau, Career Planning and Placement Office, Learning and Counseling Center, Financial Aid Office and the Division of University Relations. Adjoining the building is the University Chapel which offers daily Mass and the Campus Theatre.

Assumption Hall the oldest residence hall on campus was dedicated in 1896. A four-story structure with 99 student capacity it houses the campus historic and recreation area and offers both single and double occupancy rooms.

Canine Hall the oldest classroom building on campus was built in 1922 and completely renovated in 1968. A four-story building it houses the School of Education and a curriculum library, Reading Clinic Guidance and Counseling Clinic and the Institute of Formative Spirituality.

College Hall a six-story classroom and office building dedicated in 1970 is the seat of the College of Liberal Arts and Sciences and the Graduate School of Liberal Arts and Sciences housing 10 of their individual departments and faculties. The School of Nursing is located on the sixth floor. Special instructional facilities include psychology numerical analysis, nursing and practice skills laboratories along with two lecture halls.

The Counseling Center houses the University's Counseling and Research teams of the Department of Psychology and as the center for indoor sports of the University's intramural sports program. The gym features a modern fully equipped weight training facility, the Dukes Court Weight Room which is open to the students and the University's various intramural teams. McCloskey Field dedicated in the mid-1970s is the center for intramural outdoor activities. Other athletic facilities include three self-enclosed tennis courts and two outdoor basketball courts. One of which is converted for street hockey in the winter months.

The Edward J. Hanley Hall of Law, dedicated in 1982 resulted from the renovation and expansion of the old University Library building. The new facility houses faculty and administrative offices research and study rooms, two large amphitheatre lecture halls, classrooms, seminar and classroom areas and a moot courtroom. The greatly expanded law library is the most accessible one of its kind in the city with its central location and convenient hours (7 a.m. to midnight Monday through Thursday, 10 a.m. to midnight, Saturday and Sunday). The law library is open to members of the local bench and bar as well as law students.

The Library Resource Center dedicated in 1978 is a modern attractive five-story structure that signifies the crowning achievement of the University's expansion and redevelopment program. Housed in over 100,000 square feet of space is a collection of over 400,000 bound volumes more than 3,600 periodicals and an extensive microfilm and audiovisual collection. The facility also contains a number of special collections including the African Collection on African culture, society, politics, the Rabbi Herman Halperin Collection on Medieval Christian and Jewish intellectual and religious thought, the Silverman Collection of world literature in philomathic and the University Associates Collection, seating capacity for approximately 1,000 patrons including graduate study carrels and conference facilities. The new Library constitutes a highly functional facility that should remain responsive to the needs of the University community for many years to come.

The Duquesne Towers a 17-story air-conditioned double-tower residence for 1,200 men and women featuring separate housing wings was dedicated in 1970. The facility features a full-size indoor swimming pool and a health center. The old University Library building the Home of the Holy Ghost Congregation, the center also features a journalism laboratory, simulation laboratory, instructional photo laboratory, seminar rooms, athletic areas, a small theatre and a performance room. The women's recreation center including a gym and small fitness area located on the ground floor.

The Duquesne Union a modern architectural facility with an innovative concrete and glass design is the center of campus activities and student life. Dedicated in 1967 it houses the offices of the Student Life the Athletic Department and various student organizations and interest groups. Facilities include three separate dining areas, a ballroom and student lounge the campus bookstore the campus information center and a recreation center which features eight bowling lanes pocket billiards table tennis, pool a music room room pinball, electronic games a rock cellar an art gallery and an emporium.

The G & G Buildings in addition to housing various administrative offices of the University is the site of some undergraduate classes. Also houses the University's Vocational Office.

The Gymnasium is used as a practice facility by various intramural and intercollegiate teams of the Department of Physical Education and the Division of University Relations. The gym features a modern fully equipped weight training facility, the Dukes Court Weight Room which is open to the students and the University's various intramural teams. McCloskey Field dedicated in the mid-1970s is the center for intramural outdoor activities. Other athletic facilities include three self-enclosed tennis courts and two outdoor basketball courts, one of which is converted for street hockey in the winter months.

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The Music School The Edward Hanley Hall of Music also resulted from conversions of older structures.

The Public Safety Building is the headquarters for the University's Public Safety Office.

Richard King Mellon Hall of Science an attractive four-story structure dedicated in 1968 houses the Departments of Biological Sciences, Chemistry, Physics and the School of Pharmacy. Designed by one of the world's most renowned architects Mies van der Rohe the building won the Laboratory of the Year Award in 1969. Instructional facilities include a large amphitheatre-style lecture halls with seating capacities of 248 each.

The Music School dedicated in 1967 has 73 pianos including 56 Steinways, five organs and over 300 orchestral and band instruments available for student use. The school offers training and degrees in conservatory and music education jazz and sacred music as well as an innovative program in music therapy. Individual and group practice areas are available in the building along with acoustically equipped classrooms. Performances are given throughout the year in the recital hall and the school hosts the annual Mid-East Instrumental Music Conference.

Rockwell Hall dedicated in 1958 as a 10-story structure which houses the School of Business and Administration its Business Simulation Laboratory contains 12 conference rooms equipped with television cameras and microphones for observation and recording of activity in the individual rooms. Rockwell Hall also houses a snack bar, the Business School's student study lounge the University's Student Room, the Dormitory, the Public Safety Building is the headquarters for residents of the Holy Ghost Fathers who serve the University as administrators and teachers. The grounds of the hall include an attractive mall and grotto.

ACCREDITATION AND AFFILIATION

University Accreditation Commission on Higher Education Middle States Association of Colleges and Schools State Board of Education of the Pennsylvania Department of Education.
Part II: Programs and Courses

College of Liberal Arts and Sciences

HISTORY
In 1878 the Fathers of the Congregation of the Holy Ghost and the Immaculate Heart of Mary established a College of Arts and Letters which was incorporated in 1882 as Pittsburgh Catholic College of the Holy Ghost with authority to grant degrees in the arts and sciences. In 1911 the College and University Council of the Commonwealth of Pennsylvania extended the charter to university status and approved the amendment in favor of the corporate title: Duquesne University.

PHILOSOPHY AND OBJECTIVES
Duquesne University believes that education is concerned with the human person as a whole—mind and body. It believes that each individual has the obligation to self society and God to develop potential to the fullest. In this commitment the College of Liberal Arts and Sciences sets its objectives and forms curriculum.

The objectives of the College are:

1. To provide a solid foundation for lifelong learning.

2. To develop an awareness of the methodologies and epistemologies of the major areas of knowledge so that evaluations and judgments may be valid.

3. To assist in both the growth of self-knowledge and the development of a philosophy of life.

4. To assist the individual to understand his relation to God to society and to nature.

5. To perfect that skill in the use of standard English necessary to clear coherent expression of one's thoughts, hopes, and ideals.

6. To cultivate a background for the learned professions and for scholarly pursuits.

CURRICULAR REQUIREMENTS

English Composition Proficiency at the 102 level
Modern or Classical Language Proficiency at the 202 or 212 level
Natural Sciences (Biology Chemistry Earth Sciences Computer Science Physics Mathematics) Nine Credits
One two-semester sequential course must be completed
Social Sciences (Political Science Psychology Sociology) Nine credits
At least two disciplines must be represented

ACADEMIC REQUIREMENTS

Completion of 120 credits
A minimum cumulative overall quality point average of 2.0
A minimum cumulative quality point average in the major and minor of 2.0
Removal of I and F grades in major and required courses
Completion of sequential courses in proper sequence
Completion of the residence requirement The last 30 credits must be taken at the University
Submission of application for the degree No student is considered a degree candidate until he files an application for the degree on a form provided by the Registrar
Any course taken as a Temporary transfer at another institution must be approved before the classes are taken

DEGREES
The College confers two undergraduate degrees: Bachelor of Science and Bachelor of Arts. Students...
who complete the major in biology, chemistry, computer science, mathematics, physics, the BS degree in this area. Students who complete the major in art history, classics, economics, English, history, journalism, medical media, modern languages, philosophy, political science, psychology, sociology, and theology receive the BA degree. Students majoring in mathematics can follow a curriculum leading to either a BA or BS degree.

**Special Programs**

**CONCENTRATED STUDIES PROGRAM**

Concentrated studies is a special developmental education program designed to help students improve their basic skills and realize their full potential for college work. Students in the program take a prescribed block of college level courses during their freshman year and thereafter complete their education at Duquesne in the traditional manner. Courses offered in the program:

- 001 002 BASIC LANGUAGE SKILLS 4 cr. each semester
- 001 003 BASIC CONCEPTS OF PSYCHOLOGY 4 cr.
- 005 006 FOUNDATIONS OF LANGUAGE LATIN 4 cr. each semester
- 007 PHYSICAL GEOLOGY 4 credits
- 008 STUDY SKILLS 1 cr.

**COORDINATED EDUCATION**

The University sponsors a Cooperative Education Program. Its purpose is two fold: 1) to provide students with opportunities in which they can apply classroom learning to practical work and business settings, while learning and gaining the types of experience unavailable in any classroom; and 2) to offer employers a source of talented students who can serve in pre-professional capacities as full-time or part-time employees and who will be prime candidates for full-time employment after graduation.

The program is open to any upper class student who has a minimum 2.5 quality point average. The full time co-op student is limited to a four or six month work period or tour during which he would be a 40 hour a week paid employee of the cooperating employer. The tour can be repeated with the same or a different cooperating employer upon the student's completion of a full semester of academic work after the first work tour.

The part-time co-op or parallel co-op student is in effect a part-time employee while carrying a full academic load at the University. Parallel co-ops can be engaged in semester after semester. Students in either program register for a credit course Cooperative Work Experience College of Arts and Sciences which carries one to nine credits. Full-time co-op students also have the option of registering for one or more academic courses during their co-op work tour for additional information contact the College Cooperative Education Advisor or the Director Cooperative Planning and Placement.

**PROGRAM IN WORLD LITERATURE**

The Departments of Classics, English and Modern Languages jointly offer a World Literature program—both major and minor sequence. The program is designed to give the student an awareness of the historical and cultural framework in which Classical British, American, Continental, Asian and African Literatures have evolved. Each language major offers a minor in translation and an in-depth study of selected major literary works in these areas.

**COURSES OFFERED**

- **Major** 24 credits (the core and the remaining 18 credits distributed equally among Classics, English and Modern Languages)
- **Minor** 15 credits (6 in the core and the remaining 9 credits distributed equally among Classics, English and Modern Languages)
- **Core Course** Readings in World Literature I and II

**DEPARTMENTAL COURSE OFFERINGS**

- **Classics** Any of the current offerings in Classical Literature either in translation or in the original language at the 200 level or above
- **English** Any of the current course offerings in Literature at the 333-400 level as approved by the department chairman
- **Modern Languages** Any of the current offerings in Modern Languages either in translation or in the original language above the 302 level

**BACHELOR OF ARTS—LIBERAL ARTS AND GENERAL SCIENCES**

This program is designed for those students who prefer not to choose a formal major or minor offered in a traditional discipline. All requirements other than the major and minor must be completed. Students must select one area of concentration: Humanities, Social Sciences, Natural Sciences. A concentration requires a minimum of 30 credit hours and a maximum of 39. Courses must be chosen from courses 200 and above.

**PRE-LAW**

Students who intend to prepare for a career in law may select any subject area for the undergraduate major. They will be expected to meet degree requirements in the major department as well as admission requirements of the law school of their choice.

**PRE-PROFESSIONAL HEALTH EDUCATION**

Students who intend to prepare for a career in medicine dentistry veterinary medicine or related fields may choose the subject area of their choice and select a major as soon as possible. They must meet degree requirements of the major department as well as admission requirements of the professional school of their choice. A faculty committee on Pre-professional Education assists the medically-oriented student.

**INTER-SCHOOL MINORS**

Inter-school minors are available in Business and Administration Education: Music and Pharmacy. For complete details students should consult the Director of Academic Advisement.

**BACHELOR-MASTER'S**

A student who has completed all requirements and a total of 90 credits with a 3.5 average may apply for the bachelor's degree. After successful completion of the master's program the student will receive the bachelor's degree.

**BACHELOR'S/PROFESSIONAL SCHOOL**

A student who has completed 90 credits with a 3.5 overall average and satisfied all undergraduate curricular requirements may apply for the bachelor's degree after the successful completion of the first year of professional work in an accredited medical or law school.

**LIBERAL ARTS ENGINEERING**

Students who intend to prepare for a career in engineering may enter a 3-2 binary program that Duquesne University maintains with Case Western Reserve University in Cleveland, Ohio. Students are expected to meet the curricular requirements of the College of Liberal Arts and Sciences except for the completion of a major program. Under the guidance of a liaison officer they will normally complete the program at Duquesne in three years then enter an engineering program at Case. Upon completion of the program at CWRU students will be awarded the B.A. Degree from Duquesne and the B.S. Degree from the School of Engineering at Case.

For complete details consult with the liaison officer for the Binary Program in Engineering in the Mathematics Department.

**SECOND-BACHELOR'S DEGREE**

A student who has received a bachelor's degree from another school may become eligible for a second bachelor's degree by earning an additional 30 semester hours in residence in the College of Liberal Arts and Sciences. Students will be able to earn another degree if they have at least 30 semester hours of credit which are not part of their bachelor's degree. The additional 30 semester hours must be completed at the University and may not be taken through cross-registration.

**THREE-YEAR BACHELOR'S**

For information contact the Office of Admissions or the Dean of the College.

**ASSOCIATE DEGREE PROGRAMS**

The College of Arts and Sciences offers the following Associate Degree Programs:

- International Communications for Industry
- Communications for Industry
- Criminal Justice
- Applied Technology

A minimum of 60 credits is required. For details consult the College Advisement Office at 434-6394 or the Assistant Dean at 434-6393.

**CLEP AND ADVANCED PLACEMENT**

See page 132.

**ACADEMIC REGULATIONS**

**Electives**

A maximum of 12 non-A & S credits may be applied to the BA/BS degree with the exception of certain approved inter-school minors which may extend this number to 15 or 18 credits.

**ACADEMIC LOAD**

Students may normally carry five courses in one semester. A schedule of more than five courses or 17 credits must be approved by the Dean. In the summer sessions students normally carry one credit a week for six credits in the six-week session. A 12-credit schedule in a regular semester is considered full-time study. Students on academic probation may not take more than 15 credits.

**EFFECTIVE CATALOG**

Degree requirements are those stipulated in the catalog of the year in which a student matriculates. The student is responsible for knowing the requirements for the degree. Requirements may be changed without notice or obligation. This catalog has been prepared on the best information available as of July 1982.

**UNIVERSITY-LEVEL COURSES TAKEN WHILE IN HIGH SCHOOL**

University-level courses taken by entering freshmen while in their senior year of high school will be evaluated for credit if the following criteria have been met:

- the courses are recorded on an official transcript from an accredited institution of higher learning
- the grades must be C or better
- the student has completed one semester at Duquesne with a C+ or better

**MAJORS**

The College of Arts and Sciences offers the following majors:

- Art
- History
- Biochemistry
- Biology
- Chemistry
- Classics
- Classical Civilization
- Computer Science
- Criminal Justice
- Economics
- French
- German
- Gerontology
- History
- International Relations
- Journalism
- Liberal Arts/Engineering

See page 132.

**ACADEMIC REGULATIONS**

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A maximum of 12 non-A & S credits may be applied to the BA/BS degree with the exception of certain approved inter-school minors which may extend this number to 15 or 18 credits.

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Students may normally carry five courses in one semester. A schedule of more than five courses or 17 credits must be approved by the Dean. In the summer sessions students normally carry one credit a week for six credits in the six-week session. A 12-credit schedule in a regular semester is considered full-time study. Students on academic probation may not take more than 15 credits.

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- the courses are recorded on an official transcript from an accredited institution of higher learning
- The grades must be C or better
- the student has completed one semester at Duquesne with a C+ or better

**MAJORS**

The College of Arts and Sciences offers the following majors:

- Art History
- Biochemistry
- Biology
- Chemistry
- Classics
- Classical Civilization
- Computer Science
- Criminal Justice
- Economics
- French
- German
- Gerontology
- History
- International Relations
- Journalism
- Liberal Arts/Engineering

See page 132.
Course Descriptions

ART DIVISION

Director: Mrs. Patricia S. Ingram

Survey and period courses in the history of art are offered by the Art Division of the Classics Department to introduce the concepts of art history to those who wish to extend their visual periphery and to understand the role of the visual arts in Western culture. Qualified students are advised to take collateral courses in classics history, philosophy, and psychology and additional upper division art history courses offered at member colleges of the Pittsburgh Council on Higher Education. In addition to personal enrichment and heightened awareness of man's will to create visual forms, the study of art history can lead to careers in teaching, publishing, museology, historic preservation, and urban redevelopment.

REQUIREMENTS FOR THE MAJOR

The major consists of 111 112 History of Art plus 18 credits in upper division art courses and two upper division collateral courses selected from 250 Classical Tradition in America (Classics) 419 Renaissance Literature and the Arts (English) 406 Aesthetics (Philosophy) and 313 Archaeology and the Bible (Theology). Recommended elective: 123 Classical Mythology.

REQUIREMENTS FOR THE MINOR

The minor consists of 12 credits of upper division courses. The prerequisites are six credits of introductory and survey courses at the 100 level or their adjudged equivalent.

101 Understanding Art 3 cr

A study of the techniques and styles of architecture, sculpture, painting, and the graphic arts in Western society with an emphasis upon increasing the student's comprehension of our visually oriented culture. Suggested preliminary for all upper division art history courses.

102 Introduction to Modern Art 3 cr

An attempt to render accessible to the spectator the realities formulated by the artists of the last two decades. Formal analysis of the art object and examination of the motivational forces which shaped its creation lead to an overall view of the structural framework of twentieth century painting and sculpture.

111 History of Art Ancient to Medieval World 3 cr

A chronologically oriented, detailed presentation of the historical development of the Western art. This survey deals with Near Eastern, Greek, Roman, Early Christian, and Medieval art. Can be elected to fulfill the history/literature requirement.

112 History of Art: Renaissance to Modern World 3 cr

A continuation of 111 Surveys Renaissance, Baroque and Modern art in Western Europe. Can be elected to fulfill the history/literature requirement.

123 Classical Mythology 3 cr

A presentation of the major myths of Greece and Rome with special attention to contemporary interpretations of myth and the influence of myth on art and literature. (Offered by the Classics Department.)

206 Greek Art 3 cr

A study of the architecture, sculpture, vase painting and minor arts of the Greek world from Minoan to Hellenistic times. The student is introduced to the extensive vocabulary of Greek art which has been a continuous formative force in Western art. (Offered in alternate years.)

207 Roman Art 3 cr

An introduction to Roman innovations in architecture, sculpture, and painting. The background of Roman art in Etruscan, Greek, and Egyptian civilizations is investigated and the impact of Roman art in formulating Christian Art and Renaissance art and Neo-Classicism is analyzed. (Offered in alternate years.)

208 French Art 3 cr

A survey which discusses ideas, schools, and styles in the history of French art from the Roman occupation to the present. Highlights are Medieval, Renaissance, Rococo, and Modern art. (Offered in alternate years.)

210 American Art 3 cr

An overview of American architecture, painting, sculpture, and decorative arts intended to acquaint the student with the major trends and contributions of American art from colonial to modern times.

260 The Classical Tradition in America 3 cr

A study of the influences of Greco-Roman civilization on American culture.

312 Late Medieval Art 3 cr

Western European art from the 11th to the 14th century. Focus is upon the development of stone vaulting systems, monumental architectural sculpture, stained glass, fresco, and panel painting, and illuminated manuscripts in England. France. Italy and Germany. (Offered in alternate years.)

321 15th Century Renaissance Art 3 cr

An investigation of the Renaissance spirit of the 15th century. Concentration is upon comparisons of Northern and Southern attitudes of man, nature, and social structure and to materials techniques, pictorial representation, and iconography. (Offered in alternate years.)

331 Art of the 19th Century 3 cr

A survey of the visual arts in the 19th century. The visual arts not only reflect the dramatic changes in the artists' use of form, color, line, texture, and light but also express and convey the changing political and social values in society.

332 Art of the 20th Century 3 cr

A chronological study of 20th century painting and sculpture which looks beyond visual perception and tries to find the essence and meaning of reality.

DEPARTMENT OF BIOLOGICAL SCIENCES

Chairman: Howard G. Ehrlich, Ph.D.

Biology is the scientific exploration of life in its many forms and details. It is a fundamental element in a balanced liberal education and offers both intellectual insight and knowledge vital to societies facing serious problems having biological implications. The biology program is a part of that search by mankind to understand its world in an effort to more effectively deal with the realities of that world and pursue its great promises of future personal development may be centered. The program offers opportunities to develop professional attitudes and technical competence which aid in opening avenues for advanced study and career fulfillment as well as personal enrichment. The course of study pursued can aid in preparation for professional careers in teaching, research medicine, dentistry, veterinary medicine, and allied health fields as well as for advanced study in various graduate school specialties. While many students choose to pursue the benefits of advanced study in graduate and professional schools, others prefer to pursue opportunities in biological technologies in pure and applied research and service in hospitals, universities, private industry, and governmental service. Diverse opportunities are available in specialty sales, pharmaceutical laboratories, medical laboratories, energy research laboratories and chemical laboratories, food technology and processing, fisheries, oceanography, conservation, health services, space biology, agricultural technology, food and drug administration, environmental services as well as in other industries and agencies.

From cubism to conceptual art, from Picasso to Pollock and Pop, this course offers a thorough exploration of the visual arts of the 20th century.

Special Topics in Art History 3 cr

An occasional course in this series is offered when special interests of students and faculty can be served. Courses offered include The Image of Women in Art, Picasso: Impressionism, Egyptian Art, and others.

Selected Readings 3 cr

In-depth research utilizing the resources of Pittsburgh area libraries and of source material relevant to the history of Western Art. Prerequisite: Permission of instructor.

American Painting and Sculpture 3 cr

An examination of the forms created by American painters and sculptors from the early 17th through the late 20th century. A special class intent involves arriving at a clear understanding of America's concept of reality during these years particularly in the 20th century.

American Architecture 3 cr

Construction style, building types, and concepts in planning American architecture from the 17th century to the present. Field trips to important monuments in the Pittsburgh area, including Falling Water, are scheduled.

American Decorative Arts 3 cr

Decorative arts from the Pilgrims to the Bauhaus are examined in historical, formal, technological and cultural fields. Field trips to Carnegie Institute and other area locations can be scheduled. (Offered in alternate years.)

Introduction to Museum Studies 3 cr

An overview of the various functions of art and architecture museums in American society. Prerequisite: Permission of Department.

Internship 3 cr

Practical experience in art related areas introduces the student to the many opportunities in the art field. Prerequisite: Permission of Department.
REQUIREMENTS FOR THE MAJOR
A minimum of 31 semester hours is needed. Majors are required to take General Biology 111 112 and to select other courses so that a balance is achieved with experience in biology of inheritance, structure and function at the molecular, cellular and organismal levels. Within that context students may follow their preferred interest in subject matter selection and concentration. The specific program selected is individually formulated with the student through consultation with an advisor. Courses 107 108 201 202 206 207 208 and 220 will not count toward a major in Biology. Qualified majors may take two 500 level graduate courses during their senior year and apply them toward their undergraduate degrees.

EXTRADEPARTMENTAL REQUIREMENTS
Calculus I General Chemistry 121 122 Organic Chemistry 205 206 or 221 222 General (or Analytical) Physics 201 202 or 211 212. Students also should consider extra-departmental electives in chemistry, mathematics, and computer science. A minimum of 15 credits in Biology must be taken at Duquesne University for the major.

REQUIREMENTS FOR THE MINOR
The department offers two minor programs:
1. Professional Minor which consists of 111 112 and a minimum of 12 credits selected from the department's minor courses numbered 200 or above. Individual course prerequisites must be met.
2. Academic Minor which consists of 107 108 and 111 112 and a minimum of 12 credits selected from the department's courses numbered 200-395. Courses which are open to either non-majors may be selected. Individual course prerequisites must be met.

If a student takes 107 108—Principles of Biology and 111 112—General Biology, the credits for the 107 108 will not apply to the total number required for the degree. These courses are not interchangeable.

NON-MAJOR COURSES

107 108 Principles of Biology 3 cr each
A study of the living world of which man is an integral part. It includes considerations of organization, activity, growth, reproduction, inheritance, environmental influences and other interrelationships. This course is designed to provide the non-scientist with the biological information and principles necessary to assume an enlightened role in our increasingly complex society. Not for Biology Major credit. 107 is prerequisite to 108. Lecture

201 Biology of Microbes 3 cr
Examination of microbes as to what they are, how they grow, how they may be controlled, what their relationships to other living things are, why and how some of them cause disease. Not for Biology Major credit. Lecture

202 Biology of Microbes Laboratory 1 cr
Illustrates methods of observation, growth, and identification of microbes as well as methods of controlling these organisms using sterilization techniques, disinfectants and antibiotics. Not for Biology Major credit. Lecture

206 Environmental Biology 3 cr
This course deals with the biological background for understanding environmental problems and considers aspects of population, land use and pollution as well as legal aspects of the amelioration of environmental abuses. Not for Biology Major credit. Lecture

208 Anatomy and Physiology Laboratory 1 cr
Anatomy and Physiology Laboratory includes examination of the micro and gross anatomy of the body, physiological experiments and exposure to certain basic clinically important measurements and techniques. Prerequisites: 207 Anatomy and Physiology for concurrent registration. Not for Biology Major credit. Laboratory

220 Sex and Sexuality 3 cr
Consideration of sex and reproduction as universal biological functions with special emphasis on physiological and psychological basis of human sexuality. The course also aims to examine sexual functioning, sexual behavior and sex therapy. Not for Biology Major credit. Lecture

226 Genetics 4 cr
See description under Major Courses

230 Stress and Adaptation 3 cr
See description under Major Courses

MAJOR COURSES

111 112 General Biology 4 cr each
Introduction to the scientific study of life at the molecular, cellular and organismal level. It involves consideration of relevant structure function development reproduction, inheritance evolution and ecology. This course provides the basic information and concept necessary for understanding living systems. Theory and laboratory

203 Microbiology A 4 cr
Introduction to microorganisms, their morphology, metabolism, ecology and cultural characteristics with emphasis on their interaction with other organisms, including man. Principles of medical and health-related aspects of microbiology, chemotherapy, industrial agricultural and marine microbiology are presented. Prerequisites: Biology 111 112 and organic chemistry for concurrent registration. Lecture and laboratory

204 Microbiology B 4 cr
Introduction to viruses and immunity with emphasis on host-parasite interactions and patterns of infectious diseases in populations. Prerequisites: Biology 111 112 and organic chemistry (or concurrent registration). Not for Biology Major credit. Lecture and laboratory

226 Genetics 4 cr
A study of the mechanisms of inheritance and their resulting effects on individuals and populations, including their implications in the life of man. Methods and techniques are illustrated with specific examples drawn from a wide range of species from microorganisms to man. Prerequisites: 107 108 or 111 112. Lecture and laboratory

231 Stress and Adaptation 3 cr
A study of the biological effects of acute and chronic stress and of various origins and the neuro- and hormonal regulations associated with adaptation to stress. Prerequisites: 107 108 or 111 112. Lecture and laboratory

232 Vertebrate Macrostructure 4 cr
A comparative study of the gross structure of vertebrates and the relationship of that structure to function. Prerequisites: 111 112. Lecture and laboratory

233 Vertebrate Microstructure 4 cr
A study of tissue and organ structure and the relationship of that structure to function. Prerequisites: 111 112 and 232 or permission of the instructor. Lecture and laboratory

244 Animal Development 4 cr
A comparative study of the morphological and physiological aspects of animal development emphasizing current experimental approaches. Prerequisites: 111 112 Lecture and laboratory

250 Plant Development 4 cr
Examine some of the unique features of representative types of plants as revealed by interrelationships of form, function and morphology. Prerequisites: 111 112 and 250 Lecture and laboratory

260 Plant Physiology 4 cr
Varied studies of the growth requirements and regulatory mechanisms of important plant types with emphasis upon environmental control. Prerequisites: 111 112 and 250 Lecture and laboratory

212 Animal Physiology 4 cr
Examination of the physiological mechanisms of body function in animals including consideration of the basic components of ecological systems and the manner in which various organ systems contribute to the maintenance of physiological homeostasis. Prerequisites: Biology 111 112 Lecture and laboratory

318 Physiology of Reproduction 4 cr
The course includes the anatomy, histology, physiology, biochemistry and endocrinology of vertebrate reproduction. The main emphasis is on the physiology of puberty, estrous and menstrual cycle, conception, pregnancy and parturition. The physiological bases of fertility and infertility also are included. Prerequisites: 111 112 and 232 or 244 Lecture and laboratory

324 Regulatory Physiology 4 cr
A treatment of physiological and environmental regulations with emphasis on neuroendocrine integration and adaptation. Prerequisites: 111 112 and 312 or 444 Lecture and laboratory

336 Human Parasitology 3 cr
Principles of parasitism, epidemiology and life cycles of human parasitic protozoans and helminths, especially useful in allied health fields. Prerequisites: introductory biology and a course in animal physiology or ecology, or permission of the instructor. Lecture and laboratory

395 Special Topics 1 3 cr
Treatment of topics of current or special interest in biology. Lecture and laboratory or combinations

398-399 Undergraduate Research 2 4 cr each
Opportunity for selected students to work in the laboratory on research problems under the direction of a faculty member. 398 is not prerequisite to 399. Maximum of four credits. Registration by permission of instructor. Lecture and laboratory

411 Ecology 4 cr
The goal is to provide an overall grasp of the principles and procedures underlying ecological thought. Past, present and future aspects of environmental studies are considered from the ecosystem viewpoint. Interrelationships of living things with each other as well as the non-living components emphasize the need for inter-disciplinary studies and quantitative data. Both terrestrial and aquatic habitats are used to illustrate concepts such as growth, niche succession and competition. Applicability to current human problems is discussed, such as waste disposal, population growth, fuel agriculture and urbanization.

444 Cell Physiology 4 cr
A study of cells with regard to means of obtaining energy, including respiration, fermentation and photosynthesis. Work done by the cell including biosynthesis, active transport, and cell movement. Cell growth and reproduction. Interrelationships of cellular structure to these processes. Prerequisites: 111 112 and organic chemistry. Lecture and laboratory.

448 Diagnostic Microbiology 3 cr
A course to acquaint the student with the methods employed on clinical samples by clinical laboratories.
in the isolation and identification of microbial agents which cause human disease. Cultural as well as serological techniques are included. Emphasis is on the interpretation and significance of laboratory findings in the diagnosis of microbial disease, especially useful in medical technology, nursing, and allied fields. Prerequisites introductory biology and a course in microbiology or permission of the instructor. Lecture and laboratory

Descriptions of the Following Courses are Provided in the Graduate School Catalog

501 Research Skills 3 cr
503 Cell and Electron Microscopy 3 cr
505 Molecular Genetics 3 cr

DEPARTMENT OF CHEMISTRY
Chairman Andrew J. Gladd III Ph.D.

The Chemistry program is designed to provide the student with a fundamental background in chemistry and understanding of the relationship of chemistry to the other sciences and disciplines. Elective courses and the opportunity to do undergraduate research allow the chemistry major to develop interests in a specialized area of chemistry such as analytical inorganic organic and physical chemistry.

Because of the fundamental nature of chemistry as a science, numerous opportunities for advanced study, as well as employment, are open to chemistry and biochemistry majors. A large percentage of students elect to continue their study in graduate programs in chemistry and related fields. Chemists and biochemists provide a core of personnel in pure and applied research, technical sales, technical libraries, management positions in the chemical and related industries, the space industry, education, the environmental sciences, and the health professions, such as medicine, dentistry, and veterinary medicine. The major in biochemistry centers around the core of basic chemistry courses while also providing advanced courses in biochemistry and electives in biology.

REQUIREMENTS FOR THE CHEMISTRY AND BIOCHEMISTRY MAJORS

Thirty-two semester hours are required. All students must take 121 122 221 222 321 322 and 421 Mathematics 115 116 Physics 201 202 or 211 212 Biology 311 312 proficiency in German, Russian, or French at the 201 or 212 level is required. If a student takes 111 112 and 121 122 chemistry courses for the credits the 111 112 will not apply to the total required for the degree. Courses 101 102 205 206 will not be counted toward a major.

Chemistry Major All students must take 322 324 422 and 524. In addition, Chemistry 525 and 526 may be taken as electives.

Biochemistry Major All students must take 401 402. In addition, Chemistry 525 and 526 may be taken as electives.

Students planning to enter a graduate chemistry department should take 322 324.

Students who intend to work in industry after graduation are strongly advised to take 548 Industrial Organic Chemistry and 549 Principles of Polymer Science.

To meet the American Chemical Society's requirements for Professional Certification, the Chemistry Major must elect two additional courses from the following 401 523 524 537 538 545 546 547 548 572. Mathematics 216 or 308 Biology 505 Pharmacy Sciences 539 and Physics 306. One of these must be a laboratory course. This laboratory requirement can also be fulfilled with 490 The Biochemistry Major must take 322 324 and 422 for certification. Course disciplines of the 500 level courses can be found in the Graduate School catalogue.

REQUIREMENTS FOR THE MINORS

A minor in Chemistry consists of 12 credit hours beyond 121 122. A minor in Biochemistry consists of 12 credits beyond 121 122. Normally 201 206 or 221 222 along with 401 will constitute the Biochemistry minor.

101 102 Chemistry and Society 3 cr each

The impact of chemistry on society reaches every phase of life. The course attempts to provide a link between chemistry and the changes in our technological society. In the first semester the basic concepts of chemistry are developed for the non-science student and applied to current topics such as air and water pollution, energy pesticides, etc. The second semester deals with the biochemistry of living systems. Chemical principles are used to explain the normal life processes of photosynthesis, respiration, etc. as well as abnormal conditions such as drug-induced poisons etc. on metabolic processes. Students with a good high school background do not require the first semester as a prerequisite. Others should see the instructor before registering for the second semester. Lecture three hours.

111 112 Principles of Chemistry 4 cr each

The course is divided into three segments: physical, organic, and biochemistry. In the section devoted to physical chemistry, the laws of chemical behavior are developed with particular reference to the simple molecules of inanimate nature. The organic section deals primarily with the structural features of organic compounds the chemistry of functional groups and the practical applications of organic compounds in the synthesis of polymers of carbohydrates, lipids, proteins, nucleic acids, enzymes, vitamins, etc. Biochemistry is treated in terms of the digestion and metabolism of diets. The function of enzymes in the metabolic process and the abnormal metabolic conditions that prevail in disease. Lecture three hours Recitation one hour Laboratory two hours

121 122 General Chemistry

The fundamental principles and concepts of chemistry are presented from the standpoint of atomic and molecular structure with illustrative examples from descriptive chemistry. The basic concepts of thermodynamics, chemical kinetics and equilibrium are introduced. The laboratory portion of the first semester illustrates physical and chemical properties in a quantitative manner and the laboratory portion of the second semester illustrates the principle of ion equilibria including qualitative inorganic analysis.

121 Lecture three hours Recitation one hour Laboratory two hours 4 cr
122 Lecture three hours Recitation one hour Laboratory six hours 5 cr

205 206 221 222 Organic Chemistry

The theoretical background is developed from the standpoint of the electronic structure of molecules and the accompanying energy considerations. The preparation and reaction of organic and physical include the spectrophotometric properties of representative organic compounds are discussed in detail. Prerequisites 121 122 For 205 206 Lecture three hours Recitation one hour Laboratory four hours and for 221 222 Lecture three hours Recitation one hour Laboratory six hours.

321 322 Physical Chemistry 3 cr each
A study of the structure and properties of the various states of matter: thermodynamics, thermokinetics, and an introduction to chemical physics. Prerequisites Physics 201, 212, Chemistry 121. Mathematics 116. Lecture four hours.

323 324 Physical Chemistry Laboratory 1 cr each
Lecture portion of Chemistry 321 322 four hours

326 The Computer in Chemistry 3 cr

The computer will be introduced as a tool in the solution of problems from the fields of analytical, inorganic, organic and physical chemistry. The student will progress from the use of the computer as a black box problem solver to the design and coding of programs to solve problems in his field of interest. Experimental design and analysis will be introduced by library programs which permit the computer to simulate laboratory equipment in the production of experimental data. Prerequisite Chemistry 321. Lecture three hours.

401 Introductory Biochemistry 4 cr
An introduction to biochemistry at the cellular level. The structure and chemistry of cellular components (proteins, nucleic acids, etc.) of cellular reagents, enzymes, and drugs. Reactions of carbohydrates, lipids and amino acids discussed. Prerequisites 206 or 222. Lecture three hours Laboratory four hours.

421 Analytical Chemistry 4 cr
Theoretical and practical training in modern methods in chemical analysis with emphasis on instrumental methods. Prerequisite 322. Lecture three hours Laboratory eight hours.

422 Inorganic Chemistry 4 cr
A survey of the basic principles required for understanding inorganic chemistry including atomic and molecular structure, crystal structure, non-aqueous solvents, and coordination compounds. Prerequisite 322. Lecture three hours Laboratory four hours.

490 Undergraduate Research Maximum 2 cr
Selection of this work on a research under the direction of a staff member.

524 Molecular Basis of Biochemistry 3 cr
A discussion of the chemistry of amino acids and proteins from the viewpoint of structure, physical chemistry, and the human condition. An introduction to enzyme chemistry is also included in the course. Prerequisite 401.

DEPARTMENT OF CLASSICS
Chairman Jerry Clack Ph.D. 1982-83 Stephen T. Newmyer Ph.D. 1983-84

The study of Classics is a unique discipline. It is not the study of a language or a literature alone. It is rather the study of the structure and properties of the various states of matter: thermodynamics, thermokinetics, and an introduction to chemical physics. Prerequisites Physics 201, 212, Chemistry 121. Mathematics 116. Lecture four hours.

321 322 Physical Chemistry

Laboratory 1 cr each
Lecture portion of Chemistry 321 322 four hours

326 The Computer in Chemistry 3 cr

The computer will be introduced as a tool in the solution of problems from the fields of analytical, inorganic, organic and physical chemistry. The student will progress from the use of the computer as a black box problem solver to the design and coding of programs to solve problems in his field of interest. Experimental design and analysis will be introduced by library programs which permit the computer to simulate laboratory equipment in the production of experimental data. Prerequisite Chemistry 321. Lecture three hours.

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DEPARTMENT OF CLASSICS
Chairman Jerry Clack Ph.D. 1982-83 Stephen T. Newmyer Ph.D. 1983-84

The study of Classics is a unique discipline. It is not the study of a language or a literature alone. It is rather the investigation of one of the world's inspired civilizations, the Graeco-Roman world. As such, it offers the student insight into the broadest aspects of human existence set in a perspective distant enough from his own to expand significantly his understanding and appreciation of humanity's aspirations, failures, and occasional triumphs.

REQUIREMENTS FOR THE MAJORS

The Department offers four major programs: Classical Latin, Classical Greek, Classical Languages (knowledge of both Latin and Greek required), and Classical Civilization (no knowledge of Greek/Latin required). Credits applied to any major must be at the 200 level or above.

1) The Classical Latin major requires at least eighteen credits in Latin as well as six credits of ancient history or ancient literature courses in English.

2) The Classical Greek major requires at least eighteen credits in Greek as well as six credits in ancient history or ancient literature courses in English.
3) The Classical Languages major requires at least twenty-four credits in Latin and Greek (with a minimum of twelve credits in each) in addition to six credits of ancient history or ancient literature courses in English. The Survey of Sanskrit Literature (21-1-212) may be substituted for the twelve credits of either Latin or Greek.

4) The Classical Civilization major is an individually designed program of twenty-four credits of ancient history, art, and archeology. Students majoring in Classical Civilization create programs with the close advice and the approval of the Classics Department to fit their backgrounds, interests, and career objectives. Majors should formulate programs with balanced history and literature components. They are strongly encouraged to fulfill the College language requirement in either Latin or Greek. All courses in Greek or Latin at the 200 level or above apply to the Classical Civilization Major.

**REQUIREMENTS FOR THE MINOR**

The Department offers a minor in Latin (a minimum of 12 credits above the 100 level) and a minor in Classical Civilization with concentrations in Greek Civilization, Roman Civilization, Ancient History, and Ancient Art and Literature (12 credits above the 100 level) with approval of the Department and advisors.

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101 102 Elementary Classical Latin
4 cr each
Study of the fundamentals of Latin grammar and syntax combined with occasional exercises in translation from Roman authors.

103 104 Elementary Classical Greek
4 cr each
Study of the fundamentals of Greek grammar and syntax combined with frequent exercises on translation from Greek authors.

105, 106 Basic Sanskrit
3 cr each
A study of the fundamentals of Sanskrit grammar and syntax combined with exercises in translation. Some previous foreign language experience is desirable.

107, 108 Elementary Ecclesiastical Latin
3 cr each
Study of the fundamentals of Latin grammar and syntax as represented in Scripture and Church Fathers.

201 202 Intermediate Classical Latin
3 cr each
Survey of major Latin authors.

203, 204 Intermediate Classical Greek
3 cr each
Survey of major Greek authors.

205 206 Intermediate Ecclesiastical Latin
3 cr each
Selections from Biblical and Christian Latin literature.

207 208 Biblical and Patristic Greek
3 cr each
Selections from Biblical and Christian Greek literature.

211, 212 Survey of Sanskrit Literature
3 cr each
Selected readings from major Sanskrit texts, including the Mahabharata, Hitopadesa, Kathasaritasagara, Manavadharmasastra, Rajendra, and Metherada.

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124 World Mythology
3 cr
Investigation of the dominant themes of non-Classical mythologies with special reference to Near Eastern, Celtic, Teutonic, African, and American Indian myths.

230 Ancient Theatre
3 cr
An examination of the origins and development of ancient tragedy and comedy. Readings from the works of Aeschylus, Sophocles, Euripides, Aristophanes, Menander, Plautus, Terence, and Seneca.

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231 Ancient Epic
3 cr
A study of ancient epic literature with particular attention to the techniques of oral and literary composition. Readings from the works of Homer, Aesop, and the Greek Romances.

232 Ancient Novel and Romance
3 cr
Survey of Greek and Roman prose fiction with special emphasis on the nature and development of narrative techniques. Readings from Homer, Herodotus, Xenophon, Apollonius of Rhodes, and the Greek Romances.

233 Ancient Satire
3 cr
Investigation of the satirical element in classical literature with special reference to the works of Lucian, Lucullus, Horace, Persius, Martial, and Juvenal.

240 Greek Religion
3 cr
An examination of the continuity of Greek religious experience from ancient times to the present and of the interconnection of ancient Greek religious ritual, moral experience, and religious thought.

241 Roman Religion
3 cr
A study of Roman religious beliefs and practices with attention to the development of hero cults, oriental mystery religions, and philosophical sects as alternatives to traditional religion.

242 Ancient Law
3 cr
An historical survey including the contributions of the Babylonians and the Greeks of Roman Law between 500 B.C. and A.D. 500.

244 History of Ancient Medicine
3 cr
Examination of the most significant medical theories and practices with the period from the Egyptian temple physicians to the doctors of the Roman Empire. Special attention will be given to Hippocrates and Galen.

245 Greek History
3 cr
An examination of the development of Greek history and culture from earliest times up to the death of Alexander of Macedon.

246 Hellenistic History
3 cr
A survey of Mediterranean history from the death of Alexander until the accession of Octavian and the establishment of the Roman principate.

247 History of the Roman Principate
3 cr
Study of the consolidation of the Roman imperial structure from Augustus to the death of Commodus.

248 History of the Late Roman Empire
3 cr
Examination of Roman history from the ascension of Severus to the death of Justinian.

249 Egyptian Civilization
3 cr
A survey of Egyptian history and culture from the pre-dynastic period to the establishment of Roman rule in Egypt. Special attention will be given to the artistic, literary, and religious achievements of Egypt.

250 Classical Archaeology
3 cr
A study of the archaeological discovery of classical civilization from the Greek Bronze Age through the Roman Empire. An introduction to the techniques of archaeological investigation.

260 The Classical Tradition in America
3 cr
A study of the influences of Graeco-Roman civilization on American cultural life.

261 Contemporary Literature and Classics
3 cr
An investigation of the influence of ancient myths on 20th-century French, German, Italian, English, and American literature.

300 Seminar
1-3 cr
Topics variable.

301 Greek Art
3 cr
A study of the architecture, sculpture, vase painting, and minor arts of the Greek world from Minoan to Hellenistic times. The student is introduced to the extensive vocabulary of Greek art which has been a continuing formative force in Western art. (Offered in alternate years).

302 Roman Art
3 cr
An introduction to Roman innovations in architecture, sculpture, and painting. The background of Roman art in Etruscan and Greek civilizations is investigated and the impact of Roman art in the formation of Christianty Art. Renaissance Art and Neo-Classicism is analyzed. (Offered in alternate years).

305 History of Medicine
3 cr
A survey of the development of medicine in the Western world in terms of medicine as an art and as a science. The latter part of the course will focus on the social and institutional aspects in the development of American medicine.
DIVISION OF COMPUTER SCIENCE

The curriculum in Computer Science is designed to allow maximum flexibility in direction There are three areas of concentration scientific applications business applications and computer systems engineering

REQUIREMENTS FOR THE MAJOR

A minimum of 30 semester hours is required for a major These must include the core courses 111 112 201 and 202 with the remaining courses selected from those numbered 300 and above Extra departmental requirements English 385 Professional and Technical Writing Math 115 116 Contact the Computer Science Division for extradepartmental requirements in particular area of concentration

REQUIREMENTS FOR THE MINOR

A minimum of 18 semester hours is required for the minor These must include the core courses 111 112 201 and 202 and 6 hours of computer science selected from courses numbered 300 and above

Note Many of the courses in the Computer Science Division may be taken as electives by those not enrolled in the major or minor programs Any such selections however must be cleared by the advisor through a representative of the Computer Science Division

100 Elements of Computer Science 3 cr
A computer appreciation course covering a survey of computer organization computer languages and the history of computers Not counted toward computer science major or minor

101 Introduction to Computer Science/Basic 3 cr
An introductory course for those who have had no prior computer science courses or those seeking a general introduction to computers Machine language assembly language and Basic are among the topics covered Not counted toward the computer science major or minor

102 COBOL 3 cr
Structured programming principles and techniques are introduced using the COBOL language Topics discussed are top down techniques program and project documentation file structure and the organization of programming languages

111 FORTRAN 3 cr
Elements of FORTRAN skills to construct algorithms for efficient solution of computational problems are presented This core course is required of those interested in taking additional computer science courses

112 Advanced Programming 3 cr
Advanced programming techniques using FORTRAN are presented This course develops the student s skills in the use of procedure oriented languages Prerequisite 111 Fortran

201 Machine Language Programming 3 cr
A survey of various machine configurations Topics include number systems machine language pro-

gramming assemblers and macro assemblers Prerequisite 111 Fortran

202 Data Structures 3 cr
Introduction to the theory of graphs and trees and their realization as computer programs A thorough study of data structures and algorithms for their manipulation Prerequisite 111 Fortran

301 Computer Logic 3 cr
Basic concepts used in the design and analysis of digital systems Required course for 302 Prerequisite Fortran 111

302 Computer Organization 3 cr
An introduction to current system structures of control communications memories processors and I/O devices Prerequisite 201 Machine Language Programming 301 Computer Logic

305 Introduction to File Processing 3 cr
This course is designed to introduce concepts and techniques of structuring data on bulk storage devices to provide experience in the use of bulk storage devices and to provide the foundation for applications of data structures and file processing techniques Prerequisite 102 Cobol 202 Data Structures

306 Introduction to Operating Systems 3 cr
I/O Hardware properties of magnetic tapes disc drums associative memories virtual address translation techniques batch processing timesharing scheduling resource allocation are among the topics covered Prerequisite 201 Machine Language Programming 202 Data Structures

307 Numerical Methods of Linear Systems 3 cr
This course deals with basic algorithms of numerical computation of linear algebra The use of mathematical subroutine packages are included This course is identical to Math 307 It may be used to satisfy either a Math or Computer Science requirement but not both Prerequisite 111 Fortran Math 116 and Math 306

308 Numerical Methods of Classical Analysis 3 cr
Introduces the basic algorithms of numerical computation their theoretical foundations and practical applications Programming assignments are made to demonstrate the algorithms related theory the benefits and the pitfalls associated with the method identical to Math 308 May be used to satisfy either a Math or Computer Science requirement but not both Prerequisite 111 Fortran and Math 306

309 Computers and Society 3 cr
A course designed to keep the students abreast of the current state of the art of computer science and technology and of the role that computers play in society This seminar format course will discuss the uses and misuses of computers in society and will underline the basic assumptions values and ethics which should govern the use of computer systems

311 Data Base Management Systems Design 3 cr
Introduction of data base concepts and approaches to data base management Topics include choice and design of data structures design of user oriented languages for updating and retrieving information constraints and problems associated with the use of generalized data management systems Prerequisite 102 Cobol 202 Data Structure and 405 Intro to File Processing

312 Artificial Intelligence 3 cr
Introduction to the theory of abstract mathematical machines Structured and behavioral classification of automata Finite state automata theory of regular sets Turing machines are among topics considered Prerequisite 202 Data Structure

414 Software Design and Development 3 cr
An overview of system software Examination of design and development of macro assemblers compilers and control program functions Prerequisite 102 306

415 Theory of Programming Languages 3 cr
Comparative study of properties and applications of several higher level programming languages Prerequisite 112 Advanced Programming and 202 Data Structure

419 Introduction to Micro and Mini Computers 3 cr
An introduction to the designs of micro and mini computers Exploration of assembler and specialized languages for small computers Prerequisites 201 Machine Language Programming and 301 Computer Logic

420 Computer Simulation 3 cr
The fundamentals of simulation via digital and analog computers will be presented Modern development and solution by numerical and analytical methods will be discussed in depth with emphasis on practical applications Prerequisite Fortran 111 and a course in statistics

421 Applications in Data Processing 3 cr
Data handling in terms of coding preparation acquisition summarization and tabulation and analyses using packaged programs Prerequisite Fortran 111

423 Information Systems 3 cr
Application of information systems to various areas such as education business medicine law and public administration Any one of the areas will be studied in detail Prerequisite 202 Data Structures

491-499 Selected Topics in Computer Science 3 cr
Topics selected in consultation with the advisor and the division
DEPARTMENT OF ECONOMICS
Chairman Geza Grosschmid J U D

REQUIREMENTS FOR THE MAJOR
Twenty-four semester hours are required for a major. These credits must include 221 222 321 and 322.
Extracurricular requirements Mathematics 225 in the Mathematics Department of the College. Students planning to do graduate work in Economics are advised to take calculus.

REQUIREMENTS FOR THE MINOR
Eighteen semester hours are required for a minor in Economics. These credits must include 221 and 222.

It is strongly recommended that students having economics as a minor consult with the Economics Department for advisement.

Course Descriptions are provided in the School of Business and Administration Section of this Catalog on Pages 66-67.

DEPARTMENT OF ENGLISH
Chairman Joseph J Keenan Ph D

The chief purpose of the English program is to develop the student's powers to think critically about his life. To this end the Department's curriculum unites intensive and critical reading in a broad range of our literary heritage with close attention to the presentation of ideas in writing. Attention is also given to oral expression of ideas by means of dialogue between professor and student. Not only is the degree in English an excellent preparation for law school and for graduate work in English education and library science but it also provides the liberal preparation which is sought by the business world for such areas as personnel advertising and management.

Prerequisites—English Composition 101 (or its equivalent) is a prerequisite for admission to English Composition 102. English Composition 102 (or its equivalent) is a prerequisite for admission to all other courses offered by the department.

The English Department further advises that two 200 level courses should be taken before the student attempts any 300 or 400 level course (except for 307 and 308).

REQUIREMENTS FOR THE MAJOR
The major is an individually-designed program of 24 hours of English Department courses above the 100 level. Each English major with the close advice and approval of a member of the English faculty designs a program to fit his background interests and career objectives.

REQUIREMENTS FOR THE MINOR
A minimum of 12 credit hours beyond the freshman level of which no more than six hours may be taken at the 200 level.

There are five separate emphases from which the student must choose one:
1. English Literature 201 202 and six hours in upper division English Literature courses 409 through 469.
2. American Literature 205 206 and six hours in upper division American Literature courses 471 through 489.
3. Literature and Film Introduction to Film 203 and nine hours in courses in literature and film. Examples are Shakespeare on Film and American Short Story into Film.
4. Writing 203 and nine hours in 300 level Writing Workshops.
5. English Honors Students who by invitation of the Department Honors Committee complete English 212 and two 300 Honors Seminars may count that program as an English Minor.

HONORS PROGRAM
Students who give evidence of outstanding ability in English through their performance in English Composition 101 or by virtue of superior national test scores will be invited to participate in the English Honors program at the discretion of the Department Honors Committee.

These students may apply Honors course credits to either an English major or minor or may use these credits as electives. Further details concerning the Honors program are available through the department office and will be distributed to all nominees at the time of their recommendation for admission to the program.

101 102 English Composition 3 cr each
Practice in effective writing. Review of principles of grammar and rhetoric. Introduction to literary types and forms. 101 is prerequisite to 102.

103 English Composition Honors 3 cr
An honors counterpart to 102. Composition and introduction to literary types and forms. Participation by invitation only.

201 202 English Literature Survey 3 cr each
Representative masterpieces of English literature in their literary and historical contexts.

203 Advanced Writing 3 cr
Designed to build upon writing skills learned in freshman composition. Centrally directed on development of style and accuracy. Enrollment with instructor's permission only.

205 American Literature Survey I—Beginning to Civil War 3 cr
Representative selections from major American authors treated in both their literary and their historical contexts.

206 American Literature Survey II—After Civil War 3 cr
Representative selections from major American authors treated in both their literary and their historical contexts.

207 The Novel 3 cr
Introduction both to various types of novels and to the critical analysis of fiction.

208 Poetry 3 cr

209 Drama 3 cr
An historical survey of major dramatic forms through a selection of representative works by major playwrights from the classical tradition of Greece and Rome to the Theatre of the Absurd.

210 211 Readings in World Literature I II 3 cr each
A survey of major literary works of the Western world from Homer to Cervantes (210) and from Moliere to Camus (211) with emphasis on continental traditions. The course explores both the thematic preoccupations of Western writers and the development and evolution of literary forms.

212 213 English Literature Honors 3 cr each
Honors counterparts to 201 202. Major British writers from Chaucer to Eliot. Participation by invitation only.

300 Honors Seminar 3 cr
Special areas treated in these seminars will vary and will be designated in the schedule of courses each semester. Enrollment in the Honors Seminar is by invitation of the Honors Committee of the Department of English.

307 The English Language 3 cr
An introduction to linguistic analysis with primary emphasis on the history of the structure of English from old to modern English.

308 Applied Linguistics 3 cr
Practical uses of structural linguistics in the teaching of composition and literature.

370 371 372 373 374 375 376 377 378 379 Special Studies in English or World Literature 3 cr each
Two or three courses in this sequence are offered every semester by the English Department to meet the current interests of both the students and the faculty. Examples of courses regularly offered are: Science Fiction, The English Bible and Literature; Comparative Literature; Modern Comparative Drama; Modern Short Story; Far Eastern Literature; Forms of Fantasy; Introduction to Film; The Literature of Mastery and Detection.

380 381 382 383 384 385 386 Writing Workshops 3 cr each
Courses in this sequence are offered each semester in a workshop format designed to develop students' creative and/or technical writing skills. Examples of courses regularly offered are: Playwriting; Poetry Workshop; Fiction Workshop; Writing for Business and Industry; Professional and Technical Writing. Admission by instructor's permission only.

The remainder of the English courses are divided into areas of emphasis. During a four-semester period each course from each area will be offered at least once.

Medieval Studies
409 Chaucer 3 cr
A study of The Canterbury Tales and minor poems.

410 Medieval Special Topics 3 cr
Studies in the ideas and attitudes of the medieval period approached through one of its dominant genres such as the romance, the drama, the lyric, etc. or through some of its major writers other than Chaucer or through international readings in Old and Middle English. Old Icelandic, Medieval French, and German (all read in English translation).

Renaissance Studies
413 Sixteenth Century English Literature 3 cr
Survey including non-Shakespearean drama. Sidney, Spenser, Shakespeare, Marlowe and minor figures.

414 Seventeenth Century English Literature 3 cr
Survey of drama, prose and poetry to 1660.

415 Milton 3 cr
A survey of Milton and his times. A close scrutiny of the minor poems and Paradise Lost and Samson Agonistes.

419 Renaissance Special Topics 3 cr
Studies in Renaissance thought and aesthetic in the works of one or more of its great writers: Spenser, Sidney, Donne, Jonson et cetera through the ideas and attitudes conveyed in one of the dominant genres of the Renaissance: the lyric, the epic, the drama etc.

Shakespeare Studies
433 Shakespeare I 3 cr
Comedies and romances.

434 Shakespeare II 3 cr
Tragedies and histories.

439 Shakespeare Special Topics 3 cr
Studies in Shakespeare relating his works to those of his contemporaries or concentrating on the problems of Shakespeare: biographical, aesthetic and critical. Specific works and approaches to be selected by the instructor.

Eighth Century Studies
441 English Classicism 3 cr
Developments of neo-classical literature from the Restoration to the death of Pope. Primary attention given to Dryden, Swift, and Pope.
DEPARTMENT OF HISTORY
Chairman James G Lydon Ph D
The Department of History offers a program devoted to the study of mankind in diverse cultural settings, through time. A large number of courses are taught by a faculty reflecting a variety of philosophical and methodological outlooks. Apart from the fact that the program fully meets the needs of students intending to pursue graduate work in historical studies, the history major will be well prepared for careers in law, business, or government service. Most importantly, the discipline of history offers an excellent synthesis of the liberal arts education since it effectively ties together the humanities and the social sciences.

REQUIREMENTS FOR THE MAJOR
A minimum of 30 credits must be taken including 103 104 Development of the United States to 1877 3 cr The historical development of American institutions, ideals, and society from earliest times to 1877 257 258 Russian History 3 cr each Development of socialist state in Russia from its origins to the twentieth century 259 260 East-Central Europe 3 cr each The medieval and modern history of the small nations situated between Russia and Germany on the east and west and the Baltic and Mediterranean Seas on the north and the south 266 Modern Britain 3 cr A study of the first industrial nation with special attention to the achievement of constitutional monarchy, the social and economic problems of industrialization, the nature of British imperialism, and the problems faced in the 20th century.

Canada 3 cr An introduction to Canadian history with particular attention to the years from 1763 to the present and to Canadian-American relations and contemporary Canada.

China 3 cr A survey of China's economic, political, and cultural changes before and after the establishment of the People's Republic of China.

Japan 3 cr An analysis of Japan's current cultural and economic development in light of its historical past, the Meiji era, and twentieth century expansion.

Topical Surveys
305 History of Medicine 3 cr A survey exploring the development of medicine in the western world in terms of medicine as an art and as a science. The latter part of the course will focus on the social and institutional aspects in the development of American medicine.

307 308 History of Science 3 cr each A survey exploring the significance of scientific developments within the historical and social context of Western culture.

309 American Science and Technology 3 cr The development of science and technology in America from colonial times to the twentieth century.

311 312 World History and the Historian 3 cr each The course traces the main events of world history in relation to the most important theories of world history and in the context of an inquiry into the nature of historical understanding. The first semester treats prehistory, the emergence of civilization, and the world views of the major classical civilizations. The second semester is an inquiry into the nature of modernity.

340 History of Western Law 3 cr Primary emphasis will be placed on the rise of constitutional law, especially its development in England into Common Law.

341 History of American Law 3 cr This course deals with the development of law legal philosophy, and legal institutions in America from the colonial period to the Civil War.

342 History of American Law II 3 cr This course deals with the development of law legal
philosophy and legal institutions from the Civil War to the present.

343 Church History I 3 cr
A religious and historical exploration of the growth of Christianity from the first century up to the Reformation; discussion of issues within the Church and the external forces which brought about major conflict and development.

344 Church History II 3 cr
Selected topics in Catholic and Protestant development from 1500 to the present day; special emphasis on the crises, revolutions, and reforms that were central to this development.

345 American Church History 3 cr
Emphasizes the historical development of major religious traditions in America both Catholic and Protestant. Special attention will be given to the life of the mind of Christianity in America at the frontier; the expansion of religion; and the often-controversial interaction between the Church and American culture; the place of religion in the creation of the American character; and the unique separation of church and state.

347 War in Modern Society 3 cr
A study and analysis of the phenomenon of war in the Western world from the Age of Napoleon to the present, with special emphasis upon the inter-relationship between international conflict and social political and technological change.

352 Diplomatic History of the United States 3 cr
Emphasis is upon involvement of the United States in both World Wars and its role as an imperial power.

357 History of the American Presidency 3 cr
Primarily an investigation and evaluation—personal, political, religious, social, and artistic topics.

360 Constitutional History of the United States 3 cr
An analysis of the Supreme Court and constitutional development stressing the major controversies in the field.

362 History of the United States Political Parties Since 1868 3 cr
A detailed examination and analysis of the origins, leadership, and operations of the major political parties since 1868.

364 The American Mind 3 cr
The origins, development, and contemporary modes of American thought including major climates of opinion, diverse movements, and selected scientific political, religious, social, and artistic topics.

366 The Modern Mind 3 cr
The major ideological tendencies of modern European thought and their connection to society and politics and to the major philosophical and scientific currents of the nineteenth and twentieth centuries.

370 Current History 3 cr
What are the major forces affecting our lives today? Where do they come from? Where will they lead to? Resources will be current media such as newspapers, TV, etc.

372 Asian Influences on America 3 cr
Focuses on the development of Asia for a broader understanding of the economic impact of twentieth-century Japan; the Orient has affected America's social cultural economic and technological development.

374 Diplomatic History of the Far East 3 cr
Emphasis on the impact of American international relations on current tension areas.

375 History of Inner Asia 3 cr
The history of Inner Asia from Genghis Khan to Leonid Brezhnev's Soviet Empire.

378 Europe and International Politics 1870-1970 3 cr
A study of international relations since 1870 with emphasis upon the evolution from a European-centered world to global politics.

382 Psychohistory 3 cr
Examines the inter-relations between psychology—especially psychoanalysis—and history. Psychology leadership of group behavior or war, etc.

385 Women in History 3 cr
A study of the historical experience of women from ancient times with emphasis on the factors that have led to the modern changes in women's status.

386 Historical Geography 3 cr
A survey of the physical world which is the basis for a human civilization. Past present and future: What are the possibilities and limitations of different places for human development? How successful or unsuccessful were human settlements? Emphasis also on geography as an intellectual discipline and cultural phenomenon.

389 Europe Industrialism and the Masses 3 cr
A historical analysis of Europe in the last two centuries with particular attention to the relationship between technological and social change and its impact on politics and culture.

394 United States Labor History 3 cr
Emphasizes the growth of organized labor and its role in American life.

395 Pittsburgh and the American City 3 cr
The rise of Urban America using Pittsburgh as a case study of city growth and change and the impact of industrialization, immigration, and renewal in the twentieth century.

398 Economic History of the United States 3 cr
Investigates the economic development of the United States emphasizing its impact on social and political issues as background for current economic problems.

Benjamin S. Cohen, Ed.

DEPARTMENT OF JOURNALISM

Chairman Nancy C. Jones, Ph.D.

The Department of Journalism encourages the liberal education of a student by emphasizing how a professional education for a career in the mass media relies on the liberal arts tradition. The journalism curriculum concentrates upon the development of communicative skills for creative and responsible positions in such areas of mass communication as advertising, broadcasting, newspapers, public relations, magazines, and specialized publications. A transfer student must take at least 12 credits from the department to graduate as a major.

REQUIREMENTS FOR THE MAJOR

Twenty-seven semester hours are required for a major. Required courses are 167, 267, 268, 367, 397, or 376 and 466 or 468 or 470 or 476.

REQUIREMENTS FOR THE MINOR

Eleven semester hours credit are required for a minor. Credits must include 167, 267, 268, 330, or 376 and 466 or 468 or 470 or 476.

167 Introduction to Mass Communications 3 cr
An introduction to the role of communications as advertising, broadcasting, newspapers, advertising, and public relations. A series of guest speakers from these fields is included. Course open to non-majors. (Offered during both semesters.)

199 Language for Journalists 3 cr
Aimed at improving and polishing language skills of journalists. Emphasis on word usage, grammar, spelling, and sentence structure. Open to freshmen and sophomore majors.

267 Basic Reporting and Writing I 3 cr
A general course in the fundamentals of news writing. Emphasis on the principles and techniques of news writing. Open to non-majors or approval of Department.

268 Basic Reporting and Writing II 3 cr
A continuation of basic reporting and writing. Course open to non-majors or approval of Department.

330 Public Relations Practices 3 cr
Case studies of public relations programs in industry, education, social welfare, and trade associations. The application of techniques through the design and implementation of programs for clients. Open to Junior and Senior majors.

369 Advertising Principles and Writing 3 cr
A lecture-laboratory course in the study and application of writing principles and practices for advertising. Study of various types of advertising. Open to non-majors. Prerequisite: 267 or approval of Department.

480 European Fascism 3 cr
An analysis of the major fascist movements and regimes in Europe since 1789, the nature of the revolutionary phenomena and the inevitable counter-revolutionary trend.

487 The American Frontier 3 cr
A historical analysis of the American experience before and after the War for Independence. United States since 1845. An analysis of the major political and social revolutions in Europe since 1789, the nature of the revolutionary phenomena and the inevitable counter-revolutionary trend.

489 The Search for Identity—United States since 1945 3 cr
A discussion of selected contemporary issues foreign and domestic which illustrate the identity crisis in the U.S.

490 Honors Seminar I 3 cr

491 Honors Seminar II 3 cr

499 Directed Reading: Selected Historical Topics 3 cr
370 The Broadcast Program 3 cr
A study of the programming strategies in commercial and public broadcasting. Factors impacting programming decisions, the organizing and design of program services in a variety of work-settings and the importance of scheduling in the operational design. Neither artistic nor creative functions are covered but rather pragmatic matters affecting programming executives.

371 Mass Communications and Public Opinion 3 cr
A study of the nature of public opinion and the mass communications process: effects of propaganda and barriers to effective communication. Open to Juniors, Seniors and non-majors.

372 Communications Law 3 cr
A study of the legal rights, responsibilities, and ethics of the mass media. Liberal and broadcast regulations. Open to Juniors and Seniors.

375 Editing 3 cr
A lecture-laboratory course in editing and presenting the written word for the mass media. Style, headlines, typography, covered. VDT used. Prerequisite: 267 or approval of Department.

376 History of the Mass Media 3 cr
Concentrated lecture and discussion course in an historical context of major social influences affecting American journalism from the colonial press period to contemporary society. Open to Juniors and Seniors.

378 Photography for Journalism 3 cr
A lecture-laboratory course in the preparation and use of photography for publication. Fundamentals of camera work, developing print, evaluation and editorial uses of photography emphasized. Student must provide an approved camera. Open to non-majors.

379 Graphic Communications 3 cr
A laboratory-demonstration course to introduce students to all elements of the graphic design process related to preparing publications for print. Using a grid transfer type and borders, greaekng paper, color overlays, line and clip art, preparing a key and photos. Open to Juniors and Seniors. Prerequisites: 267, 268, 375 or approval of Department. (This course recommended prior to 380.)

380 Specialized Publications 3 cr
A study of association business, industrial, professional, and non-profit communications. Writing design, and editing for newsletters, annual reports, magazines and other internal and external publications. Prerequisites: 167, 267, 268, 375.

381 Visual Productions 1
Basic instruction in the planning, script writing and use of photography for audiovisual productions primarily slide programs. Emphasis on the production of title and caption slides, text slides, and the integration of these elements into slide presentations. Open to non-majors. Prerequisite: 375 or approval of Department.

405 Advanced Public Affairs Reporting 3 cr
A lecture-laboratory course in gathering and interpretive writing on urban affairs. Analysis of major political, economic, and social developments through the local news interest and significance. Guests and field trips. Prerequisites: 267, 268.

409 Advanced Writing for Advertising 3 cr
A lecture-laboratory course in copywriting and design for advertising. Major campaign composed. Prerequisite: 369.

411 Magazine Article Writing 3 cr
A lecture-laboratory course in free-lance article writing. Students submit newsletter and specialized magazine queries, research and marketing. Open to Juniors, Seniors and non-majors with Department approval. Prerequisite: 267.

413 Advanced Writing for Radio and Television 3 cr
A laboratory-laboratory course in writing for radio and television. Scripting special types of programs such as documentaries, editorials, panel shows. PSA's, traffic continuity, promotion-publicity. Prerequisite: 367.

420 International Communications 3 cr
A study of world news systems and an analysis of their roles as instruments of world understanding. Comparison of U.S. foreign systems including newspapers, broadcasting magazines and wire services. Open to Juniors, Seniors and non-majors.

440 Writing Reviews/Criticism 3 cr
Analysis, discussion and writing of reviews/criticism of books, theater, films, television, music and the visual arts. Lab sessions stress the writing of reviews and accompanying interviews, as well as critiques of published reviews. Guest speakers include local critics and artists. Prerequisites: 267, 268 or approval of Department.

441 Secondary School Communications 3 cr
Function of publications and broadcasting in the secondary school. Role and responsibilities of school press advisors. Teaching of journalism on the high school level. Course is directed at students seeking a Pennsylvania teacher's certificate in communication with emphasis on high school journalism. Open to Juniors and Seniors. Prerequisites: 167, 267.

466 Professional Internship Advertising 3 cr
A supervised observation-experience program of study and assignment to an assigned advertising agency or industrial advertising department in conjunction with the Pennsylvania Advertising Association. Pittsburgh Chapter. Prerequisites: 167, 267, 268, 367, 372 or 376, 409. (Offered both semesters.)

470 Professional Internship Newspapers 3 cr
A supervised observation-experience program of study and assignment to a local newspaper including members of the Pennsylvania Newspaper Publishers Association. Prerequisites: 167, 267, 268, 367, 372 or 376. 409. (Offered both semesters.)

476 Professional Internship Public Relations 3 cr
A supervised observation-experience program of study and assignment to a public relations agency association, industrial non-profit or educational group in the Pittsburgh area. Prerequisites: 167, 267, 268, 330, 331, 367, 369, 375, 372 or 376, 380. (Offered both semesters.)

485 Industrial Advertising 3 cr
Deals with the principles and practices of industrial marketing communications. Emphasis will be placed on trade-papers, ads, direct-mail advertising, descriptive product folders, sales letters and presentations. Examination will be made of related crafts such as commercial art, typography, printing and marketing and media selection. Prerequisites: 167, 267, 268, 367, 369.

490 Individual Projects in Mass Communications 1-3 cr
Individual research projects in the mass media. Related to a media topic not covered in other courses. Written paper or other appropriate formats. Open to Junior and Senior majors only. Prerequisite: Permission of instructor and department chairman.

DEPARTMENT OF MATHEMATICS
Chairman: Charles A. Loch M.A.

The Department of Mathematics offers a sequence of modern courses which will help students in developing their ability to think scientifically and form independent judgments. 2) provide students with a breadth and depth of knowledge concerning not only manipulative skills but also fundamental and essential theory. 3) enable students to use their knowledge in the formulation and solution of problems. 4) give students the necessary basis of foundation for the pursuit of graduate study or productive effort at the bachelor level.

REQUIREMENTS FOR THE MAJOR
Bachelor of Arts Degree A minimum of 32 semester hours is required. These must include 115, 116, 215, 216, 303, 415, 416. The remainder must be selected from courses numbered above 300. Exceptionally able seniors are encouraged to seek departmental approval to include 500 level mathematics courses listed in the graduate catalog. Extraregional Requirements: Computer Science 101 Basic or 111, Fortran.

Bachelor of Science Degree A minimum of 32 semester hours is required. These must include 115, 116, 215, 216, 303, 415, 416. The remainder must be selected from courses numbered above 300. Exceptionally able seniors are encouraged to seek departmental approval to include 500 level mathematics courses listed in the graduate catalog. Extraregional Requirements: 20 hours in science 211, 212 General Analytical Physics and Computer Science 101 Basic or 111. Fortran must be taken. The remaining courses may be selected from Biology 111, 112 and 226 and above Physics 212 and additional Computer Science courses.

REQUIREMENTS FOR THE MINOR
A minor must include 115 and 14 additional credits selected from courses numbered above 115. 116 must be included. For Business majors 215, 216, 315, 321 are recommended. For economics and social science majors 222 or 308, 225 or 301, 306 are recommended.

101 Elementary Mathematics I 3 cr
A remedial course in the fundamentals of algebra including the solution of equations and inequalities. Not to be counted toward a major or minor in the mathematics/science area requirement.

103 Finite Mathematics I II 3 cr each
A course meeting the needs of non-science students in the College for an introduction to matrices and their applications. Linear programming. Probability. Statistics, computer and other relevant topics. Not counted toward a major or minor.

105 College Algebra and Trigonometry 4 cr
A modern course in college algebra and analytic trigonometry for those students who do not possess the prerequisites for 115. Not counted toward a major or minor.

107 108 Introduction to Modern Mathematics I II 3 cr each
This course is designed for elementary education students in the School of Education. Not to be counted toward a major or minor in the mathematics/science area requirement.

109 College Algebra 3 cr
A traditional course in college algebra for students who are not prepared for 115. Not counted toward a major or minor. Credit will not be allowed for both this course and 111.

111 Calculus for Non Science Students 3 cr
Differentiation and integration of algebraic, logarithmic and exponential functions. Maxima and minima area. Exponential growth. Not counted toward a major Credit will not be allowed for both this course and 115.
**MEDICAL MEDIA COMMUNICATIONS DIVISION**

Co-Directors: Frank R. Klapak, M.Ed., and John Gibbs, B.S.

The major in Medical Media Communications emphasizes the development of professional attitudes and creative technical competencies necessary to produce programs of instruction in the health care industry for professional and para-professional continuing education staff training and development, patient information and education, and community relations.

**REQUIREMENTS FOR THE MAJOR**

A minimum of thirty-six credits is required. The major may concentrate on either Design or Production. All majors must complete 101 Introduction to Instructional Media, 103 Introduction to Video Production, 378 Photography, 406 Advanced Video Production Techniques, 407 Medical Photography, and 408 Internship.

The Design concentration should include 301 Scriptwriting for Media Production, 304 Development of the Health Care Program, and 404 Management of a Media Facility. The Production concentration should include 201 Cinematography, 203 Audio TV Mechanics and Lighting, 206 Graphics, and 402 The Director: The Design concentration should include 201 Cinematography, 203 Audio TV Mechanics and Lighting, 206 Graphics, and 402 The Director.

The minor comprises only media production courses.

**REQUIREMENTS FOR THE MINOR (Media Production)**

Five courses are required for the minor. 101 Introduction to Instructional Media is required of all minors. In addition, four of the following courses may be selected: 103 Introduction to Video Production Techniques, 201 Cinematography, 203 Audio TV Mechanics and Lighting, 206 Graphics, 378 Photography, 381 Visual Production Techniques, or 406 Advanced Video Production Techniques.

It should be noted that the minor in the Medical Media program contains no specifically medical courses.

**DETAILED DESCRIPTION OF THE COURSES**

**101 Introduction to Instructional Media**

3 cr

An introductory course familiarizing student with equipment, instructional technology, and process of selection, utilization, and evaluation of media resources required.

**103 Introduction to Video Production Techniques**

3 cr

An introduction to the various aspects of video production, including equipment, studio and location video production, and the use of video as an instructional tool.

**104 Development of Health Care Programs**

3 cr

A look at the design of television programs for health care and the approach to instructional decision making, purpose, and method.

**378 Photography**

3 cr

A lecture/laboratory course in the preparation and use of photography. Fundamentals of camera work and developing printing and print evaluation.

**402 The Director—The Producer**

3 cr

A look at the role of the Director as the catalyst in media production, and the Director as the Coordinator of good directors and their contributions to the art.

**404 Management of a Media Facility**

3 cr

A look at the role of the Director as the catalyst in media production, and the Director as the Coordinator of good directors and their contributions to the art.

**406 Advanced Video Production Techniques**

3 cr

A look at the role of the Director as the catalyst in media production, and the Director as the Coordinator of good directors and their contributions to the art.
DEPARTMENT OF MODERN LANGUAGES AND LITERATURES

Chairman Francesca Colecchia Ph D

The Department of Modern Languages offers courses in French, German, Italian, Russian, Spanish, and Swahili. On the elementary and intermediate level in French, German, and Spanish, the student may choose from two tracks of language courses, both of which satisfy College degree requirements. One of these emphasizes reading and the other reading, writing, speaking, and aural comprehension. In conversation and composition courses the student's fluency in the active use of the language is strengthened. Subsequent courses stress primarily literary studies in which the student is systematically introduced to a survey of the literature and is given a working acquaintance with the culture of the groups whose language he is studying. Choice of courses dealing with specific works, authors, and auxiliary subjects is also presented.

The student possessing a knowledge of foreign languages will find career opportunities in a number of fields such as education, government employment, foreign service, social work, industry, and tourism.

REQUIREMENTS FOR THE MAJOR

The Department offers major programs in French, German, and Spanish. In addition, it offers minor programs in these languages: Italian and Russian as well as non-major courses in Swahili.

The major programs in Modern Languages and Literatures consist of a minimum of 24 semester hours at the 100 level and above. Required courses are

- French 301 302 462 463 Majors will discuss their courses with their advisors
- German 301 302 460 461 Majors will discuss their courses with their advisors
- Spanish 301 302 401 402 453 454 Majors will discuss their courses with their advisors

Elementary and intermediate courses must be taken in sequence. It is recommended that students not take advanced courses out of progression. Credit toward the major or minor will not be given for 201 202 211 212 or 239 240 which are intermediate level courses. 302 is the recommended prerequisite to all courses numbered 312 and above.

It is recommended that majors in the Department major a course in the art of the country in whose language they specialize as well as one course of literature in translation in the literature of a country other than their major of language.

A maximum of 12 transfer credits will be accepted toward the major.

Junior Year Majors are strongly encouraged but not obligated to participate in programs approved in advance by the Department. Further information may be obtained at the Department office.

REQUIREMENTS FOR THE MINOR

The minor program consists of a minimum of 12 semester hours at the 100 level and above.

490 Independent Field Study (All Languages) Var cr

The student will participate under the supervision and guidance of the instructor in selected tours to various countries, where she undertakes independent study on selected and approved projects involving the exploration and study of history, life, work, arts, and culture. Prerequisite: Prior permission of the instructor and Department Chairman.

French

101 102 Elementary French 3 cr each

Fundamentals of oral and written French. Three hours lecture and one hour laboratory each week.

111 112 Elementary French for Reading 3 cr each

The course will stress basic grammar and structure for reading comprehension.

115 116 French for Musicians 3 cr each

Specially designed for majors in music to provide them with those skills in French to meet their professional requirements. Registration limited to students in the School of Music. This course does not allow for continuation at the 200 level or higher.

120 Intensive French 6 cr

Fundamentals of oral and written French. Utilizes a different approach allowing the student to complete one year's work in one semester. Six lecture hours and one-hour laboratory each week.

201 202 Intermediate French 3 cr each

An intensified review and continuation of 101 102 Prerequisite 102 or equivalent.

211 212 Intermediate French for Reading 3 cr each

Prerequisite 102 or 112.

220 Intensive French 6 cr

Review and continuation of 120 Utilizes techniques allowing the student to complete one-year's work in one semester. Prerequisite 120 102 or equivalent.

239 240 Readings in Modern French Authors 3 cr each

Selections from modern works of literature. Do not carry credit toward a major or minor. Prerequisite 202 or equivalent.

301 302 French Conversation and Composition 3 cr each

Prerequisite 302 or its equivalent is the recommended prerequisite to all courses above 302. Prerequisite 202 or equivalent.

320 345 Pro Seminar in French Literature and Culture 3 cr each

All courses numbered 320 through 345 are pro-

seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester. Recommended prerequisite French 302 or its equivalent.

320 Stylistics 321 Phonetics

322 Theatre De L Avant Garde 323 Maupassant

324 Balzac

325 Realism and Naturalism

326 The Literature of the Existentialist Movement

327 The Symbolist Movement in French Poetry

328 French Poetry Middle Ages to 19th Century

329 17th Century French Literature

330 French Prose Fiction 19th Century

331 18th Century French Literature

460-475 Seminar in French Literature 3 cr each

All courses numbered 460 through 475 are seminars in literature designed to offer the advanced undergraduate student the opportunity to study various aspects of literature in greater depth. The following courses represent current seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All seminars carry three credits a semester. French 462 and 463 are recommended prerequisites for these courses.

460 History and Culture of France since the Revolution

461 History of the French Language

462 Chanson de Roland through 17th Century

463 18th Century to Modern Period

464 17th Century French Theatre

465 18th Century French Theatre

466 19th Century French Poetry

467 19th Century French Novel

468 19th Century French Theatre

469 20th Century French Poetry

470 20th Century French Novel

471 20th Century French Theatre

472 Sartre and Camus

473 Le Nouveau Roman

474 Le Nouveau Theatre

480 Directed Readings Var cr

Readings of literary texts under close faculty supervision for majors only and only with permission of the Department. Variable credit.

German

101 102 Elementary German 3 cr each

Fundamentals of oral and written German. Three hours lecture and one hour laboratory each week.

111 112 Elementary German for Reading 3 cr each

The course will stress basic grammar and structure for reading comprehension.

115 116 German for Musicians 3 cr each

Specially designed for majors in music to provide them with those skills in German to meet their professional requirements. Registration limited to students in the School of Music. This course does not allow for continuation at the 200 level or higher.

201 202 Intermediate German 3 cr each

An intensified review and continuation of 101 102. Prerequisite 102 or equivalent.

211 212 Intermediate German for Reading 3 cr each

Prerequisite 102 or 112.

239 240 Readings in Modern German Authors 3 cr each

Selections from modern works of literature. Do not carry credit toward a major or minor. Prerequisite 202 or equivalent.

251 Commercial German 3 cr

Prerequisite 201 or equivalent.

252 Readings in Scientific German 3 cr

Prerequisite 202 or equivalent.

301 302 Intermediate German Composition and Conversation 3 cr each

Prerequisite 302 or its equivalent is the recommended prerequisite to all courses above 302. Prerequisite 202 or equivalent.

320-345 Pro Seminar in German Literature and Culture 3 cr each

All courses numbered 320 through 345 are pro-

seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester. Recommended prerequisite German 302 or equivalent.

320 History of German Culture from the Franks to Hitler

321 History of German Culture from Hitler to the Present

324 Popular Tradition in German Literature The Fairy Tale The Heroic Tale

473 Le Nouveau Roman

474 Le Nouveau Theatre

480 Directed Readings Var cr
325 Popular Tradition in German Literature
Legend Animal Fable
326 Women Figures in German Literature from Goethe to Boll
327 German Women Authors and Critics
328 Introduction to German Drama
329 Introduction to German Poetry
330 Modern German Prose
331 Modern German Theatre
460 475 Seminar in German Literature
All courses numbered 460 through 475 are seminars in literature designed to offer the advanced undergraduate student the opportunity to study various aspects of literature in greater depth. The following courses represent current seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All seminars carry three credits a semester. Recommended prerequisite: German 302

460 German Literature to Lessing
461 Lessing His Life and Works
462 Advanced German Stylistics
464 German Romantic Literature
465 Modern German Narrative
Hesse, Mann, Kafka
466 Tolerance in 18th Century German Literature Lessing Schiller
467 The Age of Goethe
468 Goethe's Faust
469 Concept of Love in the German Medieval Epic and Lyric
470 Literature of Enlightenment
471 Sturm und Drang
480 Directed Readings
Reading of literary texts under close faculty supervision for majors only and with permission of the Department Variable credit
Italian
101 102 Elementary Italian
Fundamentals of oral and written Italian. Three lecture hours and one hour laboratory each week
115 116 Italian for Musicians
Specially designed for majors in music to provide them with those skills in Italian to meet their professional requirements. Registration limited to students in the School of Music. This course does not allow for continuation at the 200 level or higher
201, 202 Intermediate Italian
An intensified review and continuation of 101-102. Prerequisite: 102 or equivalent

301 302 Italian Conversation and Composition
Prerequisite: 202 or equivalent
314 315 Individual Study
Prerequisite: 202 or equivalent
320-345 Pro-Seminar in Italian Literature and Culture
All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester.
321 Modern Italian Novel (Levi Buzzati, Cassola Moravia)
322 Commercial Italian
323 Pirandello, Svevo Pavesse
324 Introduction to Italian Poetry (Leopardi, Carducci Pascoli D'Annunzio)
325 Introduction to Italian Poetry (Ungaretti, Saba Montale Quasimodo)
Russian
101 102 Elementary Russian
Fundamentals of oral and written Russian. Three hours lecture one hour laboratory each week
201, 202 Intermediate Russian
An intensified review and continuation of 101-102. Prerequisite: 102 or equivalent
301 302 Russian Conversation and Composition
Prerequisite: 202 or equivalent
314 315 Individual Study
Prerequisite: 202 or equivalent
320-345 Pro-Seminar in Russian Literature and Culture
All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester.
320 321 Intermediate Spanish
322 Spanish Realism and the 19th Century Novel
323 Don Juan as a World Literary Figure
324 The Generation of 98
325 Contemporary Spanish Novel
326 Contemporary Spanish-American Novel

310 312 Spanish Conversation and Composition
Prerequisite: 202 or equivalent
314 315 Individual Study
Var Cr
Prerequisite: 202 or equivalent
320-345 Pro-Seminar in Spanish Literature and Culture
All courses numbered 320 through 345 are pro-seminars in literature and culture. The following courses represent current pro-seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All pro-seminars carry three credits a semester.
320 321 Intermediate Spanish
322 Spanish Realism and the 19th Century Novel
323 Don Juan as a World Literary Figure
324 The Generation of 98
325 Contemporary Spanish Novel
326 Contemporary Spanish-American Novel

327 History of Spanish Culture
328 Modern Spanish Theatre
329 Revolt and Change The Spanish-American Novel
401 Spanish Literature from the Cid through the Siglo de Oro
3 cr
402 Spanish Literature from the 18th Century to the Present
3 cr
453 454 Trends in Latin American Literature
3 cr each
460-475 Seminar in Spanish Literature
All courses numbered 460 through 475 are seminars in literature designed to offer the advanced undergraduate student the opportunity to study various aspects of literature in greater depth. The following courses represent current seminar offerings. They will be offered on a rotated basis and/or as circumstances warrant from semester to semester. All seminars carry three credits a semester. Recommended prerequisite: Spanish 401-402 or equivalent
460 The Quijote
461 Spanish Literature since the Civil War
462 Avant-Garde Spanish American Theatre
463 Lorca and the Generation of 1927
464 The Literature of the Siglo de Oro
465 Literature of Spanish Romanticism
466 The Age of Enlightenment
467 Readings in Medieval Literature
480 Directed Readings
Readings of literary texts under close faculty supervision for majors only and with permission of the Department Variable credit

DEPARTMENT OF PHILOSOPHY
Chairman John Sallis Ph D
The program offered by the Department of Philosophy is designed to be a basic part of the student's liberal education. It is intended to introduce students to philosophical thinking past and present to provide a discipline for asking the basic questions of life and to help students begin relating their other academic subjects to one another and to human experience. The Department made up of professors who have different philosophical interests attempts to develop the capacity for independent thinking on all issues
REQUIREMENTS FOR THE MAJOR
The Department requires majors to take nine philosophy courses above the 100 level of these nine courses three must be selected from the Historical Sequence and two from the sequence of Advanced Courses

REQUIREMENTS FOR THE MINOR
Five courses are required for a minor one from the Introductory Courses (104 to 107) two from the Basic Courses (200 to 217) and two from the Historical Sequence and Advanced Courses (300 and 400 levels)

Introductory Courses
104 Introduction to Philosophy 3 cr
A first-hand study of selected philosophical texts from both traditional and existential perspectives with the aim of introducing students to the nature of philosophical thinking and to the variety of philosophical issues area methods and theorems

105 Ethics 3 cr
An introduction to ethical theories of past and present time Contemporary moral issues will be considered in the light of these theories

106 Introductory Logic 3 cr
Analyses of the requirements for valid reasoning Logical fallacies types of definitions and important informal aspects of arguments in ordinary discourse will be studied in addition to the formal logic of inferences involving simple and compound statements

107 Medical Ethics 3 cr
Ethical questions that arise in medical care and research will be examined Topics might include experimentation on animals and man allocation of scarce medical resources euthanasia the privileged relationship of doctor and patient etc

108 Business Ethics 3 cr
This course designed primarily for business majors begins with a discussion of some general ethical issues and in particular the problem of a just distribution of wealth These discussions are applied to concrete current business problems

Basic Courses
200 Introduction to Phenomenology 3 cr
The basic approach to philosophical issues developed by Husserl the father of Phenomenology will be explored the types of signs meaning the possibility of philosophy as rigorous science etc are considered

202 Philosophy of Being 3 cr
The approaches of philosophers such as Aristotle Aquinas Kant Hegel and Heidegger God world and man Being essence and existence Time and history Being and the possibility of metaphysics in contemporary thought

203 Philosophy of Religion 3 cr
Introduction to the nature of religious experience Topics such as religious symbolism belief and unbelief the existence of evil and free will will be considered Assigned readings include both traditional and contemporary writers

204 Literature and Philosophy 3 cr
Explores philosophical themes as they emerge within great works of literature Works will be selected from such authors as Sophocles Dante Shakespeare Goethe and Dostoyevski

205 Existential Phenomenology 3 cr
Examination of the methods and style of thought which characterizes existential phenomenology Lectures and discussion will be led by major thinkers such as Being and Time by Heidegger Phenomenology of Perception by Merleau Ponty Being and Nothingness by Sartre

206 Social Philosophy 3 cr
A systematic examination concerning the critical theories of modern society Emphasis upon seminal thinkers including Rousseau Comte Mill Marx Durkheim Weber Simmel Mannheim Horkheimer Habermas Lefebvre and Bell etc

210 Philosophy of Feminism 3 cr
A philosophical study of the second sex emphasizing phenomenology as a method which attempts to be free from prejudice includes a discussion of some contemporary ethical and legal issues concerning the equality of women

211 Marxism 3 cr
A study of the political philosophy of Karl Marx as one of the major directions in social thought Engels Lenin and contemporary Marxism

212 Political Philosophy 3 cr
The fundamental policy decisions will be explored For example Utopian state freedom justice the origins of political society war and empire and revolution may be considered Possible authors read Plato Aristotle Aquinas Machiavelli Hobbes Locke Rousseau and Hegel

213 Philosophy and American Political Thought 3 cr
A study of the philosophy of liberal democracy using such writings as those of the founding fathers their predecessors and followers Locke Montesquieu Paine Jefferson Madison Hamilton Lincoln Consideration will be given also to contemporary developments in liberal democratic thinking

214 Philosophy of Sex 3 cr
The course provides an introduction to some of the basic themes and texts both traditional and contemporary related to the philosophical study of sex It may be considered to give an account of the sexual origin of the soul Man's place in the world his relationship to society the impact of science and the historical context other issues will be discussed in relation to past and contemporary philosophical and scientific thought

Historical Sequence
300 Ancient Philosophy 3 cr
A study of the beginning of Philosophy in Greece from the Presocratics to Plotinus with readings principally taken from Plato and Aristotle

301 Medieval Philosophy 3 cr
A philosophical study of medieval texts in English translation selected as representatives of the broad range of issues approaches and theories which characterize the major Christian Jewish and Islamic philosophers as Montaigne Descartes Pascal Hobbes Spinoza Leibniz Locke Hume Kant

304 Later Modern Philosophy 3 cr
This course examines the period of modern philosophy initiated by Kant It deals primarily with the crucial thinkers of the 19th century including Hegel Feuerbach Kierkegaard Marx Mill and Nietzsche

305 Contemporary Philosophy 3 cr
A study of contemporary philosophy from 1900 to the present covering the methods and history of selected 20th century movements

322 American Philosophy 3 cr
Puritanism Enlightenment Transcendentalism Pragmatism with emphasis on key figures in American Philosophy Pierce Dewey James Joyce Santayana Whitehead etc

323 Oriental Philosophy 3 cr
Introduction to Oriental thought through a study of its major traditions as Confucianism Taoism Buddhism Hinduism will be discussed

325 Concentrated Philosophical Readings 3 cr
This course is an in-depth study of one or several philosophers such as Plato Aristotle Aquinas Descartes Kant Wittgenstein Strawson Heidegger etc varying in subject matter from time to time

Advanced Courses
312 Philosophical Anthropology 3 cr
The course examines several philosophical conceptions of man under the guiding question What is man? Man's place in the world his relationship to society the impact of science and the historical context other issues will be discussed in relation to past and contemporary philosophical and scientific thought

313 Philosophy of the Human Sciences 3 cr
The relations of the human sciences with other sciences with philosophy and with practical life the use of the mathematics and interpretation regarding such philosophical questions as the nature of matter space-time technique and technology

314 Philosophy of Natural Sciences 3 cr
A study of the philosophical implications of the methodology and conceptual framework of modern and contemporary science Contrasts between Newtonian and contemporary physics regarding such philosophical questions as the nature of matter space-time technique and technology

401 402 Thomism 3 cr
Each course dealing with the texts of St Thomas Aquinas The first semester (401) covers his metaphysics and the second semester (402) deals with his philosophy of man Neo scholastic interpretations of the texts of Aquinas (Mantain Gibson and the school of Marcella and Raineri)

403 Philosophy of God 3 cr
This course introduces students to selected texts and basic themes in types of religious experience as such as the works of Greek and Judeo Christian It emphasizes such questions as What is the Holy? What is the relationship between scientific knowledge and religious knowledge? What are the various arguments about the existence of God and the immortality of the soul? Why is there human suffering if God is good and all powerful? What do the symbols of the end
of the world mean? Attention is given both to traditional and to contemporary philosophical texts

406 Aesthetics 3 cr
An examination of theories of art which explore such questions as the beautiful creativity imagination and the role of art in life. Authors such as Aristotle, Lessing, Kant, Hegel, Nietzsche, Heidegger and Camus will be read.

415 416 417 Ancient Thinker 3 cr each
A course devoted to detailed study of a single ancient thinker such as Plato or Aristotle.

418 419 420 421 422 Medieval Thinker 3 cr each
A leading Medieval thinker or thinkers such as Augustine, Avicenna, Maimonides. Bonaventure will be studied.

DEPARTMENT OF PHYSICS
Chairman Walter S. Skinner M S

The program in the Department of Physics is primarily aimed at providing today's students with a fundamental background in traditional Physics as well as the interrelationships with other sciences and disciplines. The Department is also aware that in today's changing world there must be a suitably flexible program which will best fit the graduate for the challenges faced by the many professions which are based on the science of Physics. There is always the hope that the student will continue professional growth in Physics but it is also realized that there are many expanding paths to professional growth. The Department program, therefore, is structured to provide the background for success in graduate studies in the many current fields which seek Physics graduates, as well as preparing the student to successfully compete for the available positions in research institutions, government agencies, or private corporations. Department policy calls for individual attention to student needs.

REQUIREMENTS FOR THE MAJOR

A minimum of 32 semester hours is required for a major. These credits must include 211 212 301 329 330 361 372 402 429 430 473 474 485 484 or 485 may be substituted for 474 with departmental approval.

REQUIREMENTS FOR THE PHYSICS MINOR

The minor consists of eight hours in the General Analytical Physics (211 212) and 12 credits of upper division physics on the 300 and above level. The Department recommends the minor program from the course offerings to fit as nearly as possible the needs and desires of the individual student.

REQUIREMENTS FOR THE EARTH SCIENCE MINOR

The minor consists of a prerequisite sequence of 101 and 102 which must be taken as the first courses and 12 credits chosen from 203 204 205 206 303 304 305 307 as available to the curriculum. Not all courses are taught each semester and some are on alternate years. Earth Science 101 is prerequisite to all courses unless waived by the instructor.

201 202 General Physics 4 cr each
Designed to give the student a basic knowledge and understanding of mechanics, properties of matter, wave motion, sound, magnetism, electricity and modern physics through the use of modern day examples and applications. At the completion of this course, the student should have attained a working knowledge of physics, its techniques and reasoning. Such that the knowledge of physics gained may be applied to future work in the sciences or other fields of endeavor. Prerequisite Mathematics 103 104 or the equivalent. Students who have completed Mathematics 116 and pre-engineering students should take 211 212 Lecture four hours Laboratory two hours.

207 208 Physics and the Modern World 3 cr each
A course especially for the nonscientist. Designed to give the student some basic understanding of the physics of the twentieth century and the physicist's approach to the study of nature. The physicist's everyday life is used as a basis and classroom demonstrations are generously employed to help the student grasp concepts by showing concrete examples. No mathematics beyond basic high school algebra required.

211 212 General Analytical Physics 4 cr each
This is a calculus-based general introduction to the basic physical theories and concepts. An attempt is made to develop in the science or engineering student the quantitative approach of the physicist to the physical universe. Topics which include the vector, Newton's laws of motion, the motion of a particle in space, momentum energy, rigid body motion, fluids, gravity, wave motion, the first and second laws of thermodynamics, electronics, electricity, magnetism, and optical properties. Corequisite for 211 Mathematics 116 Lecture three hours Laboratory two hours

301 Thermodynamics 3 cr
This is an intermediate level course covering the fundamental principles of thermodynamics. Kinetic theory and statistical mechanics. The following is a partial list of items generally included: temperature, thermodynamic systems, work, heat, the first and second laws of thermodynamics, ideal-gases, entropy. Maxwell's equation, the kinetic theory of ideal gas, and the basic concept of statistical mechanics. Prerequisites 212 Mathematics 215

306 Applied Electronics Laboratory 2 cr
This course seeks to combine a treatment of the principles of modern electronic instrumentation with practical laboratory experience. Topics which will be included are passive and active electronic components, electronic measuring instruments, power supplies, amplification feedback and control, impedance matching, linear and digital devices. Emphasis will be on proper use of instrumentation rather than on advanced principles of design. Prerequisite: Permission of instructor.

329 Advanced Laboratory I 1 cr
This course is designed to acquaint the student with the modern electronics to the extent that the student will have a sufficient background to design and use simple electronic circuits in future research. A set of experiments is performed and analyzed by the student. Subjects covered are the use of research grade electronic instruments, transducers, diode and transistor circuits, transistor, design parameters, printed circuit design layout and construction. Prerequisite 212 or 202 and consent of instructor.

330 Advanced Laboratory II 1 cr
A continuation of Advanced Laboratory I which includes the following basic and advanced operational amplifiers, circuitry digital and integrated circuits, Gates, Boolean Algebra, 1 C timer circuitry, digital flip-flops and counter circuitry. A/D and D/A conversion circuitry, digital meter design and construction. Prerequisite 329 or consent of instructor.

361 Mechanics 3 cr
An intermediate course in the application of Newtonian Mechanics to simple systems. A short introduction to Vector Calculus precede the main discussion. The topics normally covered are dynamics of a mass point, systems of particles, generalized coordinates and Lagrange's Equations. Other topics which may be included are normal modes, rigid bodies, two bodies with a central force and waves on a string. Prerequisites 212 Mathematics 215

372 Electromagnetism 4 cr
An intermediate course for the science and engineering student. The following topics will usually be discussed: electrostatics, electric potential, energy relations, in electrostatics, current, Ohm's law, magnetic field, current, magnetic properties of matter, AC circuits. Maxwell's equations, reflection and refraction of electromagnetic waves and dipole and plane sheet radiation. Prerequisites 212 Mathematics 215.

402 Optics 3 cr
This course introduces the student to the principles of geometrical and physical optics. Topics may include reflection, refraction, diffraction, polarization, matrix techniques in lens system design, basic quantum optics and the laser. Prerequisite: 212 or 202 and the consent of the instructor.

405 Acoustics 3 cr
A course which presents the physical principles underlying the production and propagation of sound. Examples and explanations are focused primarily on musical sound. No mathematical preparation beyond high school algebra is necessary.

430 Advanced Research 3 cr
This course provides an introduction to research in which the student selects a research project, develops it, and prepares a report on the results. The student is also required to present results of his work at a department seminar or an appropriate scientific meeting if deemed advisable. A research topic is selected from those suggested by members of the Physics Department or other science faculty members. Work is carried out in close coordination with the selected advisor although the student's work must be the student's own. No grade is given at the end of the first semester but a final grade is assigned at the completion of the project in the Spring Semester.

473 Atomic Physics 3 cr
This course provides an introduction to special relativity and quantum theory with applications drawn mainly from modern theories of the atom. Topics usually included are quantum theory, heat radiation, the uncertainty principle, quantum theory of the hydrogen atom, many-electron atoms, atomic spectroscopy. Prerequisites: 212 and consent of instructor.

474 Quantum Mechanics 3 cr
A basic introduction to the dynamics of quantum phenomena. Some of the topics covered are Schroedinger's equation, oscillators, hydrogen atom, linear operators, Heisenberg's matrices and their observables, conservation theorem, spin angular momentum and perturbation theory. The course will emphasize application to simple systems. Prerequisites 212 Mathematics 215.

483 484 485 486 Special Topics 3 cr each
This course will be designed to allow the Physics major flexibility in
483 Nuclear Physics 3 cr
Experimental and theoretical aspects of the atomic nucleus are discussed. The topics presented may include: nuclear structure, nuclear reactions and nuclear energy. Prerequisites: 212 or 202 and consent of the instructor.

484 Introductory Solid State Physics 3 cr
Bulk properties of materials are discussed with both the phenomenological and microscopic approaches. Typical topics are the geometric structure of solids, waves, dipoles, and photon properties. The free electron model and band theory, superconductivity, magnetic properties, and magnetic resonance. Prerequisites 212 and consent of instructor.

485 Relativistic Mechanics 3 cr
This course is an introduction to the Special and General Theories of Relativity. A list of topics which may be discussed are: space-time, curvature, space-time, and the universe. Observation and prediction will be practiced when practical. Local and U.S. Weather Bureau services will be used and analyzed when possible.

204 Meteorology 3 cr
Elementary study of meteorology and weather systems in the local area as well as the world patterns. Observation and prediction will be practiced when practical. Local and U.S. Weather Bureau services will be used and analyzed when possible.

205 Planetary Geology 3 cr
A systematic study of the geology of other planets and satellites in the solar system. Methods of study used to obtain information on these bodies will be examined along with the latest available information from scientific probes.

206 Geophysics 3 cr
An introduction to geophysics and its methods and uses. Study will include the use of geophysics to determine the structure of the earth's interior. Various crustal processes such as: structure, mountain building, and plate tectonics. Prerequisite: Physical Geology or major in Physics.

303 Oceanography 3 cr
An introduction to the marine environment including the geology and ecology. Attention is paid to the importance of the ecosystem. Characteristics of ocean water and circulation patterns will be discussed. Summer courses may be combined with one of several universities offering facilities.

304 Environmental Earth Science 3 cr
An examination of the problems of ecology and the interaction of modern living on the systems of the earth which are necessary for plant and animal life. The individual effects of both natural and man-made pollution and their results geologically as well as possible cures. An advance over 101-102 is an effort to have the student gain a balanced, non-hysterical understanding of cause and effect and search for solution.

305 Physiography of the United States 3 cr
Introduces the student to the various topographic and physiographic phenomena in the contiguous states and islands of the United States. This course is designed to allow the student to become familiar with the terrain resources and economic problems of the various regions of our country. An approach to demonstrate the fact that no generalization may be made to fit all areas at once. But different problems are associated with each resource and each region.

104 Historical Geology Laboratory 1 cr
An accompaniment for 102 providing an introduction to sedimentation and the use of fossil identification. Columns sections and geologic maps and aerial photos will be used.

203 Astronomy 3 cr
Introduction to the study of astronomy and the basics of celestial mechanics, including telescopic systems and the known universe as identified from present study. Course will include assignments with Buhl Planetarium and Allegheny Observatory Star types and distances will also be examined.

101 Introduction to Political Science 3 cr
An examination of political society in the American polity. The emphasis will be on the decision-making process in the American political system. A study of the role of the President at the center of the decision-making process in the American political system. A study of the position of the state and local government. An examination of the role of the President at the center of the decision-making process in the American political system. A study of the position of the state and local government.

301 State and Local Government 3 cr
A study of the position of the state and local governments in the Federal Union.
relations including such concepts as sovereignty, nationalism, balance of power and international law and organization.

312 International Law and Organization 3 cr
A survey of the historical development and present role played by international law in the world community and the formulation and operation of such organizations as the United Nations and its specialized agencies.

315 Politics of Third World Countries 3 cr
A topical study of the politics of the emerging nations including nationalism, political integration, political parties and the role of the military and elite.

318 Nationalism 3 cr
A study of the dynamics of nationalism with emphasis on the role of nationalism in current world political problems. Includes the development of nationalism in Europe.

320 United States Foreign Policy 3 cr
A study of American foreign policy since the Second World War with concern for present issues and the domestic sources of foreign policy.

321 Government and Politics of Eastern Europe 3 cr
An analysis of political developments in the communist regimes of Eastern Europe with special emphasis on relations between the USSR and Eastern Europe in the post-Stalinist era.

323 Constitutional Law 3 cr
A detailed examination of Supreme Court cases concerning the nature of American federalism—Congressional and Presidential power, commerce clause, state powers, judicial review, due process clauses, and apportionment. Students are introduced to court and appeal procedures, the reading and briefing of court decisions, and the nature of the court review process.

324 Civil Liberties 3 cr
A detailed analysis of Supreme Court decisions bearing upon Bill of Rights guarantees with specific reference to the freedoms of speech and press, assembly, the dimensions of search and seizure, right of legal counsel, equal protection, and due process clauses and apportionment. Students are introduced to court appeals, procedures, the reading and briefing of court decisions, and the nature of the court review process.

327 Research Methods in Political Science 3 cr
A study of the techniques of scientific inquiry into political phenomena including research methods, data collection, analysis and interpretation.

402 Soviet Foreign Policy 3 cr
An analytical study of the development of Soviet foreign relations since 1917 with special emphasis upon the post-Stalinist era.

404 Simulation in International Politics 3 cr
Students spend the semester simulating an international conflict situation. They act as foreign policy decision-makers applying the principles, concepts and instruments of international politics. For majors only.

405 406 Western Political Thought 3 cr each
A study of political ideas as distinct from and yet related to political institutions which constitute our political heritage. 405 considers theorists from the classical period to the early 19th century. 406 considers theorists from the late 19th century to the late 20th century.

407 American Political Thought 3 cr
An analysis of the issues which have played a fundamental role in American Politics from colonial church-state problems to modern liberalism and conservatism.

408 Theory of Comparative Government 3 cr
An examination of the basic theories and concepts in contemporary approaches to comparative political systems.

409 Theory of International Relations 3 cr
A study of various theoretical approaches to an understanding of international relations including political realism, systems analysis, decision-making and equilibrium analysis.

412 Government and Politics of Germany 3 cr
A comparative analysis of the political systems of West and East Germany.

413 Government and Politics of the USSR 3 cr
An intensive analysis of the origin and evolution of the Soviet political system with particular emphasis upon the developments of the post-Stalinist era.

414 Public Policy 3 cr
A study of the elements, operations, and investigation of the way governmental units decide upon programs and policy objectives.

420 Contemporary Political Theory 3 cr
A study of central topics in political thought from Marx to the present time.

430 Internship in Practical Politics 3 cr
A work and observation experience in government and political offices at the city, county, state and national levels. Prerequisite: permission of department required.

436 Honors Colloquium in Political Science 3 cr
A detailed analysis of a selected topic.

450 Workshop-International Studies 3 cr
An intensive one-week interdisciplinary summer school course. This course is open to all majors, foreign policy, culture, religion, and social problems of Third World Countries. Several outside speakers augment Duquesne faculty.

DEPARTMENT OF PSYCHOLOGY
Chairman: Rev. David L. Smith, C.S.Sp., Ph.D.
The undergraduate program of the Department of Psychology is designed to introduce and familiarize students with the fundamental content, issues and interests of various areas of psychology and to provide a foundation for careers involving human services. To this end, the department offers a wide variety of courses covering psychology conceived as a human science in the natural and within a historical perspective. Further study in graduate school prepares students for careers in mental hospitals, schools, mental health and social welfare agencies, businesses and industry. In our rapidly changing society, the demand for professionally trained psychologists is increasing.

REQUIREMENTS FOR THE MAJOR
The major program consists of 103 credits in psychology plus a minimum of 24 semester hours. These credits must include 220 and 223. Majors desiring to pursue graduate study in psychology are strongly advised to take six additional credits through cross-registration at other universities. Learning Theory, Experimental Perception, Memory, etc., and Statistics are required. The mathematics department may consider part of the mathematics/science requirement. Finally, it is recommended that majors enroll in a hospital or community practicum for credit and/or do volunteer work in a neighborhood clinic. Three credits earned in practicum count toward the 24 required credits. Additional three credits in practicum may be earned above and beyond the required minimum of 24. Information about such opportunities can be obtained from the department academic advisor. The psychology department has set up a dual advisement system: departmental academic advisor and the faculty academic advisor. Prospective majors should consult the departmental academic advisor concerning the special procedure followed for the declaration of the major. A minimum of 15 credits in psychology exclusive of practicum must be taken at Duquesne University for the major.

REQUIREMENTS FOR THE MINOR
Relevant courses are taken in 203, 204, and 223, and any three of the following: 225, 228, 280, 328, 340, 352, 361, 390, 400. Level courses may be taken for the minor with permission of the department head. A minimum of nine credits in psychology must be taken at Duquesne University for the minor.

COUNSELING SERVICES
Personal counseling services are available to all students at the Center for Training and Research in Phenomenological Psychology located at the Chapel end of Centennial Walk.

103 Introduction to Psychology 3 cr
(Praerequisite: all courses) Introduction to fundamental concepts and methods of psychology. Examined from both traditional and phenomenological perspectives. Prerequisite for all other departmental courses.

220 Systematic Psychology 3 cr
For majors only. Traditional approaches behavioristic, physiological, psychoanalytic to sensation, perception, learning, motivation. Required for majors.

223 Introduction to Existential Phenomenological Psychology 3 cr
Introduction to a human science alternative to psychology as a natural science. Prerequisite: 356 and 410 required for majors and minors.

225 Developmental Psychology I 3 cr
(Infancy and Childhood) Growth and development of the child with emphasis on personality development.

226 Developmental Psychology II 3 cr
(Adolescence and Maturity) Development from adolescence through adult stages to coping with death.

230 Psychology of Community Experience 3 cr
Experience of community phenomena e.g., individual versus group priorities, intimacy vs. privacy.

280 History of Psychology I 3 cr
Overview of figures and issues in the history of psychology from precursors to present.

328 Psychology of Personality 3 cr
Critical examination of major theories of personality.

340 Social Psychology 3 cr
Foundations of social processes: attitudes, values and roles, public opinion, propaganda, and communication.

352 Abnormal Psychology 3 cr
Examination of theories and data on disordered human existence.
356 Research Psychology Theory and Practice 3 cr
Review of theory and practice of traditional and human-science research. Includes student projects. Prerequisite: 220 or 224. Permission of department head for non-majors.

361 Psychology of Identity and Fulfillment 3 cr
The ways in which identity is lived individually and collectively. Designed to be personally relevant to the life of the student. Open to juniors and seniors only.

370 Psychology of Aesthetic Experience 3 cr
Theoretical and empirical explorations of aesthetic experience.

390 History of Psychology II 3 cr
Intensive study of selected historical figures in dialogue with contemporary themes. Reading of primary sources. Prerequisite: 280.

391 Applied Psychology Practicum 3 cr
An applied psychology setting provides opportunity for working directly with professionals. Settings have included psychiatric hospitals and community centers. Majors only. Permission of Department head. Repeatable once.

392 The Individual and His World 3 cr
Examination of individual's relation to society from a developmental and cross-cultural perspective.

393 Principles of Psychoanalytic Thought 3 cr
Examination of the times and contributions of Freud and selected other major psychoanalytic theorists. Permission of department head for non-majors.

394 Psychology of Language and Expression 3 cr
Communication as a live embodied relation of person to world and others. Emphasis is on phenomenological theorists. Permission of department head for non-majors.

410 Advanced Existential Phenomenological Psychology 3 cr
Detailed investigation of selected works in existential-phenomenological philosophy and psychology. Prerequisites: 222, 224. Permission of department head for non-majors.

423 Gestalt Psychology 3 cr
Contributions of Gestalt psychology (especially the works of Kolka, Kohler, and Goldstein) to traditional and human-science psychology. Permission of department head for non-majors.

450 Contemporary Issues in Clinical Psychology 3 cr
A human-science examination of the approach methods, data and current issues of clinical psychology. Permission of department head for non-majors.

457 Independent Studies 3 cr
A tutorial course for an exceptional student who wishes to pursue a particular study with a faculty member. For majors only. Usually these intending graduate students are advanced coursework completed. Permission of faculty member and department head required.

490 Special Topic 1-4 cr
A visiting professor presents his/her specialty. A regular faculty member presents highly specialized studies or an experimental course. Repeatable. Permission of the instructor. Permission of department head for non-majors.

488 Field Research 3 cr
Sociological research emphasizing the survey technique.

DEPARTMENT OF SOCIOLOGY
Chairman: Chester A. Juczak, Ph.D.

Undergraduate instruction in sociology contributes to the liberal education of students regardless of majors and to the preprofessional training leading to graduate work in sociology and social work. A human-science examination of the approach methods, data and current issues of clinical psychology. Permission of department head for non-majors.

AREAS OF CONCENTRATION
Sociology. The orientation of sociology is independent in the sense that it is concerned with what men in groups try to achieve and how successful they are. Sociology is oriented around the problem of what men in groups actually do, how they interact to meet needs where they are. Recommended courses: 101, 102, 201, 202, 204, 214, 215, 304, 308, 309, 312, 313, 315, 323, 325, 341, 348, 349, 350.

Criminal Justice. Founded in a broad-based liberal arts curriculum, this program is designed to provide the student with the opportunity to develop his potential as a professional in many areas of the criminal justice field, including probation parole, investigation and corrections, and research. Recommended courses: 101, 103, 213, 215, 310, 320, 335, 345, 364, 365, 366, 367.

Gerontology. As the size and characteristics of the elderly segment of the population have changed, there has been increased interest in the study of the aging process: its effects on the individual and society, and its meaning for the future. The Gerontology program is designed to provide the knowledge and skills required for a student's preparation as a professional in this specialty area. Recommended courses: 101, 210, 317, 324, 327, 330, 411.

Social Services/Human Services. The principle that is the basis for this program is that classroom learning provides the foundation out of which effective social/human services may be built. Preparation for professional training and skill development is the emphasis. Recommended courses: 101, 103, 212, 213, 214, 314, 450, 451.

REQUIREMENTS FOR THE MAJOR
A minimum of 24 semester hours, not including 101, is required for a major in Sociology. These credits must include 201 and 304. In consultation with the undergraduate academic advisor, the major may select a concentration in general Sociology, Criminal Justice, Gerontology, or Social Services/Human Services. The suggested course numbers for these concentrated areas are listed above with the corresponding titles and descriptions in the following sections.

REQUIREMENTS FOR THE MINOR
A minimum of 12 semester hours, not including 101, is required for a minor. 450, 451, 488, 492, and 493 are served for majors only. Minors may select a concentration in one of four areas above in consultation with the department advisor.

Sociology 101 is a prerequisite to all courses except 102, 103, Criminal Justice and 103 Social Work. All 300 and 400 courses are for juniors and seniors only.

Sociology 101 Survey of Sociology 3 cr
A broad survey of the social and cultural aspects of environment.

102 Survey of Anthropology 3 cr
Introduction to the field of anthropology both physical and cultural.

201 Sociological Theories 3 cr
A study of selected European and American sociologists. For sociology majors and minors only.

202 Sociology of Social Problems 3 cr
Study of person/structure-change framework applicable to contemporary social issues.

205 Person and Society 3 cr
Exploration of socialization: the person's interaction with structure and culture: small groups and collective behavior.

214 Sociology of the Child and Adolescent 3 cr
Discussion of the child and adolescent socialization process in American society.

215 Computer Uses in the Social Sciences 3 cr
An introduction into computer related skills with a focus on data management, use of canned programs and the Unix computer system.

304 Methods in Sociology 3 cr
Discussion and application of techniques and research procedures used in sociological research.

308 Ethnic Groups 3 cr
Comprehensive survey of roles performed and problems faced by ethnic groups.

309 Women in Society 3 cr
The role of women in culture and the study of women's movements for liberation.

312 Sociology of Sports 3 cr
Study of the institutions of sports and their relation to American culture and other institutions.

313 Sociology of Sexual Behavior 3 cr
Discussion of sociological studies of sexual behavior.

315 Social Development--infancy to Death 3 cr
Study of the socialization process from the infant state to the dying state.

323 Medical Sociology 3 cr
Study of the impact of values and related structures on health maintenance personnel and institutions. Discussion of the social system of health organizations.

325 Family Systems 3 cr
Comparative study of the family: the interaction of the family with other community institutions.

341 Sociological Measurement 3 cr
Discussion of techniques and problems in sociological measurement.

488 Field Research 3 cr
Sociological research emphasizing the survey technique.

382 Selected Readings 1-3 cr
For sociology majors only.

Criminal Justice 103 Introduction to Criminal Justice 3 cr
An introduction to the criminal justice process: including police courts, correctional facilities and community based corrections.

213 Delinquency and Society 3 cr
A study of the phenomenon theories and causation of juvenile delinquency.

302 Evaluative Research in Criminal Justice 3 cr
Study of techniques for research and evaluation of criminal justice programs.

310 Juvenile Law 3 cr
A survey of those aspects of the legal system which relate to the identification, processing and rehabilitation of the juvenile offender.

335 Criminology 3 cr
345 Processing Juvenile Offenders 3 cr
Study of the movement of juvenile offenders through the criminal justice system—police, prosecution, courts and corrections.

346 Processing Adult Offenders 3 cr
Study of the movement of adult offenders through the criminal justice system.

364 Police Community Relations 3 cr
Discussion of the context of police—community relations: their interaction, improvement and change strategies.

365 Critical Issues in Law Enforcement (Police) 3 cr
Analysis of police in a free society: ethnic tension, police discretion, civil disobedience, police conduct and integrity.

366 Crime Prevention 3 cr
Study of contemporary crime prevention programs involving criminal justice agencies, citizens, and community politics.

467 Correctional Casework and Counseling 3 cr
Study of the counseling styles and individualized models for offender classification and group and process models of counseling.

Gerontology 210 Sociology of Aging 3 cr
Discussion of medical aspects of aging: diseases of aging and health maintenance.

317 Aged and Social Service 3 cr
Study of problems associated with the elderly and the social services developed to assist them.

324 Social Aspects of Death and Dying 3 cr
A study of American values, behaviors, customs, and other institutional practices related to death and dying with special attention to the older Americans.

327 Counseling of the Elderly 3 cr
A study of helping techniques in relation to retraining problems and physical/social psychological losses of the elderly.

DEPARTMENT OF SPEECH COMMUNICATION AND THEATRE
Chairman: Eva C. Robotti, M.A.
The program provides training essential to the several areas of speech communication. The department offers both its majors and interested students from other fields the opportunity to choose courses from a particular area of concentration or the whole range of the discipline.

AREAS OF CONCENTRATION

Social Communication This focuses on the theories and techniques of human communication on both the personal and societal levels. The student of social communication examines the concepts and procedures which govern man's interactions as individuals and as part of the mass. He also learns the practical arts of critical analysis and persuasive communication.

This training is excellent preparation for careers in law, government administration, personnel public relations, industrial communications, advertising, sales, public relations in the field which involve human symbolic interaction.

Recommended courses: 101 102 204 206 208 302 304 311 402 411 412

Theatre/Media The Theatre/Media concentration combines Aesthetic Communication skills, theatre history, and theatre performance skills with media theory and skills. This concentration prepares the student for the field of applied communication, theatre, radio, television, and public relations. Along with classroom theory and practice, students will have an opportunity to obtain practical experience onstage and backstage in Red Masques' productions and by participating in on-and-off-the-air work at WDUO (90.5) Duquesne's twenty-five thousand watt National Public Radio affiliate.

Courses in Radio and TV announcements and TV production afford the student the opportunity to work in a fully equipped TV studio.

Recommended courses: 140 141 190 204 251 263 264 280 351 370 380 385 390 391 400 450 460 470 490

Speech Pathology/Audiology The profession of Speech Pathology/Audiology is concerned with impairments in the processes of communication—speech language and hearing. Upon completion of graduate education, a speech pathologist or audiologist may provide clinical services or work in basic and applied research. He or she may be employed in schools, hospitals, laboratories, community service centers, colleges and universities.

Speech pathology and audiology is a rapidly growing field and the demand for trained personnel far exceeds the supply. The area of concentration at Duquesne is a pre-professional program designed to prepare the student for graduate study in speech pathology and audiology. The student concentrating in Speech Pathology/Audiology may be eligible to register for Speech 322 422 with a 3.00 QPA in his/her major. Completion of all required courses and the permission of the department chairman is required. Courses: 120 140 204 420 422 421 420 426

Co-requisites: Psychology 225; Mathematics 225

Advised Mathematics 225

Prospective Speech Pathology majors should declare the major before their junior year.

REQUIREMENTS FOR THE MAJOR

A minimum of 30 semester hours is required for a major in Speech Communication and Theatre. Majors will be required to enroll in three of the following courses: 101 102 190 204 260 460 470 490

A maximum of 12 transfer credits in speech can be applied to the major requirements.

REQUIREMENTS FOR THE MINOR

The minor consists of 18 credits: six credits in required introductory courses and 12 additional credits. There are four emphases that the student may follow:

1. Social Communication 101 102 plus 12 credits in any of the following: 204 206 208 302 304 311 402 411

2. Theatre/Media 140 190 plus 12 credits in any of the following: 141 251 263 264 280 351 370 380 385 390 391 451 460 470 490

3. Speech Pathology/Audiology 120 220 plus 12 additional credits. Courses 320 426 are required. The remaining six credits may be taken in any of the following: 221 420 425

4. General Speech Communication and Theatre 190 and either 101 or 102 with 12 additional credits apportioned in the following manner: six credits in any of the following: 204 206 208 302 304 311 402 plus six credits in any of the following: 141 251 263 264 280 351 370 380 385 390 391 451 460 490

Suggested activities for majors and minors in Speech Communication and Theatre include the Red Masques' Dramatic Organization, WDUO Radio and Television, the Debate Team, the Daily (student newspaper) and United Nations Organization. Suggested courses for fulfilling Communication Area requirements for non-Speech majors:

101 102 140 190

400 Independent Study (All areas of concentration) 3 cr
The student will work on a selected project under the supervision and guidance of a faculty member.

Recommended courses: 101 102 204 206 208 302 304 311 402 411 412

204 Interpersonal Communication 3 cr
Develops those communicative skills necessary to critically analyze verbal discourse and to perform effectively in public speaking situations which confront the educated person.

206 Discussion and Group Process 3 cr
Develops those communicative skills essential for functioning effectively in the small group situation.

208 Nonverbal Communication 3 cr
Nonverbal messages are those messages transmitted without the aid of language or in conjunction with language. They carry much information about the emotional state of the sender. Some components of nonverbal communication to be covered are body movement, physical attributes, physical alterations, dress, space, time, touch, objects, the eyes, and the human voice.
that influence people's beliefs and actions. Prerequisite 204 or 206. It stresses the acquisition and application of skills that will bring success in an organizational setting. Prerequisite Either 101 or 102 or permission of the instructor.

311 Process of Communication II 3 cr.
Develops more completely and philosophically the rhetorical perspective established in Process of Communication I by applying that particular perspective to contemporary systems of belief. Prerequisite 201 or permission of the instructor, recommended 304.

402 Argumentation and Debate 3 cr.
A course in applying the principles and methods of critical deliberation to a significant contemporary social issue. Emphasis will be on advocating defending and refuting a proposition of policy. Prerequisite 102 or permission of the instructor.

411 Communication and Imagination 3 cr.
Examines how the triumph of beliefs dominated by imagination over beliefs dominated by science has changed our understanding of communication.

412 Speech Practicum 15 cr.
An internship in communication industry or appropriate organizational setting. Prerequisite: Permission of department chairman required.

Speech Pathology/Audiology

120 Development of Language 3 cr.
Focus will be on the acquisition of sound meaning and grammar systems from infancy through childhood with emphasis on the comparative analysis of theories of communication development. Physical, neurological, psychological and social bases of language will be discussed. Socio-linguistic differences will be discussed with reference to Black language and regional variations.

121 Sign Language (Manual Communication) 2 cr.
Sign language systems used by and with the deaf and hearing impaired will be presented in an overall introductory methods course. Participants will be able to demonstrate ability to fingerspell and use basic signs in simple phrases and sentences. Aspects of current trends in Deaf Awareness will be included.

140 Phonetics 3 cr.
An approach to the English language based upon the fundamentals of vocal and articulatory speech sounds as systematized by the International Phonetic Association.

204 Interpersonal Communication 3 cr.
Designed to investigate the various aspects of interpersonal communication. Primary consideration will be given face-to-face human interactions in a variety of situations.
acknowledges the fact of the universal search for religious meaning and experience and seeks not only to offer the possibility of a study of the varying approaches to religious witnesses in history but also to place Catholic Theology in communion with that quest. It aspires to a fruitful encounter with other university disciplines since the department is convinced that theology's concerns are related to all vital human issues. Accordingly the Department has organized its courses into three divisions: Biblical Studies, Christian Studies, and Selected Religious Studies.

REQUIREMENTS FOR THE MAJOR
The major program consists of a minimum of 27 credits beyond the 100 level. These must include 201-213-241-250-498, the remaining credits will be chosen in consultation with the student's advisor.

REQUIREMENTS FOR THE MINOR
A minor consists of four courses beyond the 100 level. The department has also prepared suggested sequences which may be helpful to a student wishing to concentrate in a certain area of theology e.g. Biblical Studies, Roman Catholic Theology, World Religions, Religion and Culture, Christianity in History, etc. These sequences are available in the department upon request.

<table>
<thead>
<tr>
<th>COURSE INFORMATION</th>
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<tbody>
<tr>
<td>The numbering of the course indicates the level of approach 100 These courses are of the basic survey type wherein emphasis is on breadth rather than on depth and serve as background for other courses 200-300 These courses treat of subject matter in a specific area of theology and in greater depth than in the 100 category 400 Selected topics are dealt with at a more advanced-level independent research is required</td>
<td></td>
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<table>
<thead>
<tr>
<th>BIBLICAL STUDIES</th>
<th></th>
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<tbody>
<tr>
<td>114 Interpreting the Bible</td>
<td>3 cr</td>
</tr>
<tr>
<td>A presentation of tools necessary to understand the Old and New Testament as ancient literary works affording a unified view of historical events as well as the prominent religious experiences reflected in these events emphasis on practical interpretation of biblical passages</td>
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</tr>
<tr>
<td>213 Introduction to the Old Testament</td>
<td>3 cr</td>
</tr>
<tr>
<td>A presentation of the Old Testament writings in their dynamic context of culture politics and geography as well as an introduction to their literary modes and themes including practical approaches to interpreting key passages of the Old Testament</td>
<td></td>
</tr>
<tr>
<td>214 Introduction to the New Testament</td>
<td>3 cr</td>
</tr>
<tr>
<td>A presentation of the books of the New Testament including their literary makeup historical origins and testimony and theological content practical approaches to interpreting key passages of the New Testament</td>
<td></td>
</tr>
<tr>
<td>313 Archaeology and the Bible</td>
<td>3 cr</td>
</tr>
<tr>
<td>An illumination through archaeology of the historical setting the cultural background and the events described in the Bible a general introduction to the techniques of archaeological investigation and a study of the principal archaeological sites in Palestine</td>
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</tr>
<tr>
<td>315 The Wisdom Literature in Israel</td>
<td>3 cr</td>
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<tr>
<td>An exploration of the wise sayings and stories of Israelite culture and how they offer guidance today in ethical and social questions</td>
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<tr>
<td>316 The Apostle Paul</td>
<td>3 cr</td>
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<tr>
<td>An exposition of Pauline literature emphasizing the person of Paul and his impact on the early Church</td>
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<tr>
<td>321 Jesus in the Gospels</td>
<td>3 cr</td>
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<tr>
<td>A portrait of the person of Jesus Christ based on a study of the 4 gospels with ample usage of recent scholarship</td>
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<table>
<thead>
<tr>
<th>CHRISTIAN STUDIES IN GENERAL</th>
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<tbody>
<tr>
<td>140 Christian Understanding of the Human Person</td>
<td>3 cr</td>
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<tr>
<td>An investigation into the question of What does it mean to be human? according to Paul Ignatius of Antioch teaching a discussion of the relationship of the human person to self others the world and the Divine as the basis for humanism a study of the issues involved in these four relationships e.g. freedom grace contemplation</td>
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<tr>
<td>235 History of Christian Worship</td>
<td>3 cr</td>
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<tr>
<td>The meaning of ritual and worship in Christianity an analysis of the major steps in the development of the Eucharist esp. in the western tradition the impact of the Reformation on the meaning and form of Christian worship a discussion of some symbols and devotions in Roman and Protestant Christianity</td>
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<tr>
<td>260 Origins of Protestantism</td>
<td>3 cr</td>
</tr>
<tr>
<td>An introduction to the thought of the principal reformers in the western tradition the development of speculative and practical forces operative in the fifteenth-sixteenth centuries which gave rise to the reforming movement the formulation of Protestant Orthodoxy</td>
<td></td>
</tr>
<tr>
<td>271 Eastern Christian Theology</td>
<td>3 cr</td>
</tr>
<tr>
<td>A study of the main theological developments in the Eastern Church from the Patristic age on through the medieval times until the modern day as they shape its distinctive spirit and mentality and as they are interpreted in the Eastern Churches</td>
<td></td>
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<tr>
<td>274 Church History I</td>
<td>3 cr</td>
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<tr>
<td>A religious and historical exploration of the growth of Christianity from the first century up to the Reformation discussion of those issues within the Church and the external forces which brought about major conflict and development</td>
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<tr>
<td>275 Church History II</td>
<td>3 cr</td>
</tr>
<tr>
<td>Selected topics in Catholic and Protestant development since 1500 to the present day special emphasis on the crises revolution and reforms that were central to this development</td>
<td></td>
</tr>
<tr>
<td>345 Women in Christianity</td>
<td>3 cr</td>
</tr>
<tr>
<td>A survey of the Old and New Testament views of women and a history of the status of women in the Roman Catholic and major Protestant traditions with emphasis on the contemporary role and spirituality of women in Christianity</td>
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<tr>
<td>346 Dying Death in Culture and Theology</td>
<td>3 cr</td>
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<tr>
<td>A study of the process of dying as a physical psychological and spiritual happening in human life the nature of grief in human and cultural expression in patient and family the theological meaning of death and mourning</td>
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<tr>
<td>351 Sexuality Sex and Morality</td>
<td>3 cr</td>
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<tr>
<td>An analysis of the nature of sex and sexuality according to the sources and developments of Christian thought the integration of these concepts into a contemporary moral and ethical system</td>
<td></td>
</tr>
<tr>
<td>352 Value of Human Life and Current Ethical Problems</td>
<td>3 cr</td>
</tr>
<tr>
<td>A discussion of the fundamental moral principles involved in making any of the life decisions the problem of the definition of life a survey of the varied moral approaches to the issues of war and peace capital punishment abortion birth control euthanasia genetic engineering and the new embryo</td>
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</tr>
<tr>
<td>370 Early Christian Thought</td>
<td>3 cr</td>
</tr>
<tr>
<td>A study of the early Christian thinkers with emphasis on the Apostolic Fathers the Apologists Origen Athanasius the Cappadocian Fathers Tertullian and Augustine as they interpret Christian revelation and lay ground for the systematic development of Catholic theology</td>
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| 451 War and Peace in Christian Perspective | 3 cr |
| An analysis of Christian teaching of the moral permissibility of using violence and participation in war from biblical times to the present including an evaluation of the various pacifisms of non-violent resistance and of just war theories |
| 470 Christian Mysticism | 3 cr |
| A study of the manifold Christian experience of mysticism i.e. experiential contact with God as seen in famous exemplars of mystical experience e.g. Jesus Christ Paul Ignatius of Antioch Augustine John Ruyshbroeck Catherine of Siena Theresa of Avila John of the Cross Venerable Liberman |

<table>
<thead>
<tr>
<th>ROMAN CATHOLIC THEOLOGY</th>
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<tbody>
<tr>
<td>106 Rational Foundations of the Catholic Faith</td>
<td>3 cr</td>
</tr>
<tr>
<td>An investigation of the reasonableness of the Catholic Faith beginning with an inquiry into the existence of God and the possibility of His intervention in human affairs study of the gospels as reliable documents of Christ's claim to be God His life works and especially His resurrection of His founding of the Church and its identity today</td>
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<tr>
<td>201 Introduction to Theology and Theological Method</td>
<td>3 cr</td>
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<tr>
<td>An inquiry into and an analysis of the resources of theology faith revelation inspiration and Church teaching a presentation of the various approaches to theological study and the schools of theological thought in Christianity</td>
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</tr>
<tr>
<td>202 Catholicism</td>
<td>3 cr</td>
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<tr>
<td>An exploration of the major beliefs and practices of Catholicism including the nature and work of the God-Man as well as the role of Mary's study of the nature of the Church and its authority consideration of the norms of morality the Commandments the sacraments and the spirit of Catholicism</td>
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</tr>
<tr>
<td>220 The Mystery of Christ</td>
<td>3 cr</td>
</tr>
<tr>
<td>A study of the person and meaning of Christ in historical and contemporary perspective a discussion of the new bond between God and humanity and the new era in the spirituality of humanity inaugurated by the Incarnation and the Passion-Death-Resurrection event</td>
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<tr>
<td>226 Church of the People of God</td>
<td>3 cr</td>
</tr>
<tr>
<td>A study of the Christian community of believers its origins some of its major historical and dogmatic emphases and its contemporary understanding of itself the Church as a mystery as Mystical Body as People of God as sacrament</td>
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</tr>
<tr>
<td>242 Contemporary Theological Issues</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
| An examination of theological developments in an era of renewal reevaluation and cooperation e.g.
belief and unbelief. Christian and secular humanism in the future with reference to hope; heaven; hell; afterlife; and resurrection in a secular age suffering and evil.

250 Moral Perspectives in Human Development 3 cr
A Catholic perspective of the basic issues involved in the formulation of moral values within the developing person and of the sources upon which moral systems are based: a discussion of the absolute vs the relative traditional morality vs. the new morality; an application of these principles to modern problems.

256 God and His Meaning 3 cr
A theological understanding of the problem of God; a consideration of the responses of various religions and philosophies to this problem: the origins and development of the theology of God in the Judeo-Christian tradition with special focus on Catholic development.

301 Marriage 3 cr
A personally-oriented and practical treatment of the marital union as seen in its Christian theological, psychological, and sexual aspects: a discussion of Christian marriage as a bond of love as a sacrament and as a way of human fulfillment.

331 The Church in the Modern World 3 cr
An analysis of the Church's role in human development today and in offering solutions to present problems of humanity in light of Vatican II's Pastoral Constitution on the Church in the Modern World and other related documents.

335 Theology of the Sacraments 3 cr
A practical treatment of the seven sacraments in relation to their significance for the Christian's daily spiritual growth and fulfillment: consideration of human needs for ritual and symbol; discussion of recent revisions and developments in sacramental theology.

442 Theological Anthropology 3 cr
A study of humanity in its unique dignity as image of God and as responsible for the development of the universe; human experience of sin and alienation; and of liberation of divine grace given through union with the Risen Christ.

475 Theology and Catechism 3 cr
An examination of the principal theological and pedagogical themes of modern religious education and of the place of catechism in the ministry of the Church, a presentation of the historical background of the contemporary catechetical renewal.

491 Experience in the Teaching of Religion 6 cr
One semester of supervised experience in teaching religion in a high school environment in conjunction with a cooperating high school teacher and University Department coordinator. This course is open only to majors in Theology upon approval of the Chairperson of the Department.

498 Seminar in Theology 3 cr
A critical analysis of selected topics in theology or of selected works by outstanding theologians open only to juniors and seniors with a major or minor in theology.

SELECTED RELIGIOUS STUDIES

180 Religious Experience 3 cr
An examination of the dimensions of mankind's religious experience e.g., mystical, ritual, mythical, ethical, and scriptural; an analysis of the likenesses and differences of how the Divine is sensed and responded to in varied geographical cultural and chronological contexts.

240 The Religious Experience of Black Americans 3 cr
An examination of the dimensions of the religious experience of Black Americans e.g., its history, its relationship to African origins; to slavery; to racism to Christianity and to Christian denominations: an analysis of special elements in that experience e.g., Black Churches, preaching, music, and the American Way of Life.

245 Religion and Culture 3 cr
An examination of how religion influences the cultural experience of work, leisure, art, and love.

280 World Religions 3 cr
A survey of the history, beliefs, practices, and contemporary influence of the major religions of the world: Hinduism, Buddhism, Confucianism, Taoism, Maosim, Shintoism, African traditions, Judaism, Christianity, and Islam: a discussion of a basic methodology for understanding religions.

283 284 Jewish Thought and Religion 3 cr each
A survey of the history, beliefs, practices, and contemporary influence of the major religions of Bible and the Talmud (fall semester) and in medieval and modern Jewish thinkers (spring semester): an analysis of the forces and events which helped to shape this development. 283 is not a prerequisite for 284.

324 Religion and Social Issues 3 cr
A study of the influence of religious convictions in confronting major social issues of today's world e.g., population growth, famine, ecology, liberation, and revolution - truth as a social issue: wealth, taxation, and stewardship.

343 Religious Impact of Secular Thinkers 3 cr
A study of the effect of modern secular thinkers (e.g., Marcuse, McLuhan, Heiner, Toffler, Kohberg, Skinner) have had on the religious consciousness and behavior of the present age; a discussion of certain areas of culture most affected by this secular impact.

372 Religious Themes in Literature and Film 3 cr
An exploration of religious experience and religious concepts as expressed in significant works in film and literature including themes concerning the human person's relationship to self, others, and to God.

373 Varieties of Religions in America 3 cr
An examination of the religions and denominations in America with an emphasis on some uniquely American religious phenomena e.g., religious freedom, civil religion, revivalism, etc.

381 Islam 3 cr
An analysis of Islam as a religious political and cultural entity: Mohammed and the Arabian setting; history, beliefs, practices, and divisions within Islam; the Koran and Hadiths; the contemporary Muslim world.

483 Religions of Asia 3 cr
An analysis of significant religious groups in Asia such as Hinduism, Buddhism, Muslims, Confucians, Taoists, and Zen Buddhism: a study of the origins, development, beliefs, practices, and interrelationships among the religious and Asian culture.

492 Independent Study in Theology 1-3 cr
A critical analysis by an individual student of selected topics in the areas of biblical studies, Christian studies, Roman Catholic theology, or selected religious studies; or of some outstanding authors and their works under the direction of a faculty member.
School of Business and Administration

HISTORY
The School of Business and Administration was established in 1913 as the School of Accounts and Finance. The rapid growth of the School necessitated a constant broadening of the curriculum until it covered all business subjects of fundamental importance. In 1913, it was designated the School of Business Administration and with this change the School definitely became a professional school of business administration. In 1971, the name was changed to the present designation to indicate broader preparation for activity in organizations of all types.

PHILOSOPHY AND OBJECTIVES
In accord with the educational philosophy and objectives of the University, the School of Business and Administration aims to assist students in their development of the natural and supernatural virtues. The general aim is to provide through the media of instruction and related collegiate activity the facilitation of purposeful character, intellectual accomplishment, emotional and social maturity, and professional efficiency.

The School of Business and Administration has the professional responsibility of developing in students such knowledge of business principles, procedures, and problems as will enable them to become self-sustaining members of the community, aware of their social and public responsibilities and dedicated to the enlargement of the resources for worthy living. It seeks to produce graduates who upon entering their chosen careers will be effectively prepared to discharge their obligations to God, their community, and themselves as intellectual and moral beings.

The School attains this objective by guiding students through a cultural core program, a business core program, an elective area of advanced business subjects, and courses intended to prepare students for professional careers in business and public administration. The School in facilitating the research of individual faculty members.

The Center for Administration of Business and Government is obviously dedicated to promoting those University aims and objectives contained in the general statement.

The professional objective of the School of Business and Administration is to produce graduates who have acquired and developed:

- An appreciation of the importance of initiative and who consequently are willing to assume responsibility, work efficiently and harmoniously with others and adjust to changing circumstances.

- A respect for logical thinking and who strive energetically therefore to develop the capacities for analytical reasoning through the vigorous and orderly application of ethical and technical principles to problem solving.

- An understanding of the personal and professional value of effective communications and a cultivation of their capacities for speaking and writing clearly and coherently.

- An awareness of the important role of quantitative measurements in today's business and who have become skilled in the interpretation of mathematical accounting and statistical data.

- A sufficient knowledge in a professional area so that they can assume positions of responsibility with a background of learning-method and learning-impulse that will enable them to progress rapidly.

DEGREE
The School of Business and Administration grants the degree of Bachelor of Science in Business Administration. This degree may be awarded to those who satisfy the entrance requirements and complete successfully the School's degree program.

BUREAU OF RESEARCH AND COMMUNITY SERVICES
Activity complementing direct instruction takes place in five ancillary units grouped under the Bureau of Research and Community Services. All function to provide students and faculty with an opportunity for professional development as well as to provide services to the University and the community at large.

Bureau of Research
The Research Bureau carries out an independent research program and cooperates with divisions of the School in facilitating the research of individual faculty members.

- Through the University Press, the Bureau issues monographs and other publications. From time to time, contract research undertaken for business community and governmental agencies is published. This may fall within its academic aims of discovery and dissemination of knowledge.

- The Bureau is a member of the Association for University Business and Economic Research and maintains an interchange of publications with similar organizations in other universities throughout the country.

Center for Administration of Legal Systems
The Center serves as the focal point for research activity in the administration of law. It is also the coordinating agency for education and training programs of a non-credit nature for persons currently employed within the legal system. Such programs are tailored to meet the needs of specific groups and agencies. The objectives, content, time, and length of all programs are cooperatively determined with the agency involved. The Center calls upon professionally trained practitioners from the local community as well as full-time faculty to instruct in these programs.

Center for Economic Education
The Center is charged with the responsibility of initiating and promoting economic education in the society at large. More specifically, it develops and coordinates economic education within the Western Pennsylvania and Tri-State area where the primary thrust of the Center focuses on upgrading economic literacy and teaching competency in the school systems of the area.

Center for International Management
The objective of the Center is to develop a better understanding of the American involvement in international affairs and business and in management abroad through teaching and research. It is achieved by an interdisciplinary approach.

- The areas of current research focus are:
  1. Trade expansion between the USA and Eastern Europe
  2. Management in foreign nations
  3. Problems in international business
  4. International economic development with a stress on interaction among developing countries and on the relationship of developed and less developed countries
  5. International political and legal issues

The Center has no teaching program of its own. Most of its staff are faculty members from various schools and departments of the University or visiting foreign professors.

Center for Management Development
The Division conducts management training programs for industry ranging from the foreman level up through executive personnel touching every phase of management to make the individual a better rounded person in meeting the current demands of business.

- Also administered are non-credit programs which consist of courses in business and administration or special areas. These courses are offered for the continuing education of adults in the community.

STUDENT ORGANIZATIONS
These organizations limited to students in the School of Business and Administration exist for the promotion of the scholarly and professional interests of members:

- The Zeta Chapter of Beta Gamma Sigma national honorary fraternity for accredited schools of the American Assembly of Collegiate Schools of Business established at Duquesne University. Membership in this honorary fraternity is limited to juniors in the highest five per cent of their class and seniors in the highest ten per cent of their class.

- The Beta Alpha Phi Fraternity is the honorary scholarship society of the school.

Phi Chi Theta is a national professional commerce sorority.

American Marketing Association: the student chapter offers membership to students whose major interests include salesmanship, marketing, advertising, transportation or foreign trade. A selected group of seniors is permitted under faculty supervision to participate in the meetings of the Sales Executives Club of Pittsburgh and the senior chapter of the A M A.

Delta Sigma Pi a national professional business fraternity is represented by Tieta Rho chapter.

DIVISIONS AND PROGRAMS
The School of Business and Administration is comprised of three Divisions: Quantitative Science Behavioral Science and Economic Science.

Students entering the School of Business and Administration are expected to inform their advisors about their career objectives and their academic areas of concentration and to consult with them when choosing junior and senior courses indicated in any of the three Divisions. Their proposed curricular programs must of course include the University requirements and Business and Administration Core requirements as indicated in the illustrations set forth in this catalog. Consistent with their stated career objectives and with the concurrence of their advisors, students may select those courses whose area of concentration is Accounting. They are free to select any junior and senior courses from the School of Business and Administration curriculum to complete the required hours for graduation. The requirements of the Division of Accounting make the program very rigid; this is dealt with in the paragraphs following the Sample Program.

Students concentrating should be based upon career objectives and constitute as broad and flexible an educational process at the undergraduate level as is possible. Career advice should be sought from many and varied sources in the University, including faculty and Career Planning & Placement staff.

Students registering for 300-400 level courses are presumed to have passed freshman and sophomore required courses and have junior standing.

Elective courses are not necessarily offered each year.

FOUR YEAR SAMPLE PROGRAM

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
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<tbody>
<tr>
<td>Courses</td>
<td>Credits</td>
</tr>
<tr>
<td>101 English Comp</td>
<td>3</td>
</tr>
<tr>
<td>109 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>141 Economic Geo</td>
<td>3</td>
</tr>
<tr>
<td>*General elective</td>
<td>3</td>
</tr>
<tr>
<td>General elective</td>
<td>3</td>
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<tr>
<td>15</td>
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</tbody>
</table>

Course may be taken in either semester.
DIVISION OF QUANTITATIVE SCIENCE
ACCOUNTING CURRICULUM

CPA Requirements

Students who desire to become certified public accountants in Pennsylvania and who have been graduated from a four-year program in a college approved by the State Board of Education may sit for the CPA examinations. The degree program of the University is so approved and the graduate may sit for the CPA examination in other states among which are New Jersey and New York.

211 212 Introductory Accounting 3 cr each

An introduction to the fundamentals of basic accounting concepts and brief exposure to recording financial information. An extensive study of accounting information for management decisions.

311 312 Intermediate Accounting 3 cr each

This course is primarily concerned with an investigation and analysis of the accounting problems and practices of the corporation. Detailed study of the component elements of the balance sheet and income statement. Basic topics are accepted and alternative methods in the accounting cycle. Financial statements form their content and use accounting problems of the corporation. Detailed analysis of the balance sheet accounts, determination of net income, statement of sources and uses of working capital. Prerequisites 211 212.

313 Managerial Accounting 3 cr

A study of the technique involved in the gathering, recording, and interpretation of information and the resulting data in the solution of internal problems of management. Some of the topics covered are construction analysis and interpretation of reports, establishment of operating and financial standards, measurement of managerial performance, use of budgets in managerial control, use of cost data and interpretation of cost reports. Use of quantitative data in the formulation of policies concerning various aspects of Federal, State, and local taxes. Their effect on managerial decisions. Prerequisites 211 212.

314 Advanced Accounting 3 cr

This course applies fundamental theory to major topics in accounting. Activities studied are partnership, special sales procedures, consolidations, and financial planning. Prerequisites 311 312.

315 Cost Accounting 3 cr

Basic cost accounting procedures are discussed from the following view points: cost principle, cost determination, cost control, control analysis. Topics treated include: cost terminology, planning and control techniques, and development and application of overhead rates. Cost behavior patterns are studied in conjunction with development and application of overhead rates. Standard costing, job order costing, process costing joint products and by-product costing are treated in detail. Methods of judging managerial efficiency, inventory control and management control systems are also stressed. Prerequisites 211 212.

411 Auditing 3 cr

Standards and procedures employed by auditors in the examination of financial statements for the purpose of rendering an opinion are studied and evaluated. Emphasis is placed on theory and philosophy of auditing, however, case problems are used to demonstrate the application of the principles studied. Prerequisites 312.

412 Introductory Income Tax Accounting 3 cr

This course is a study of basic tax and procedure affecting primarily individuals and to a lesser extent partnerships and corporations. Principal topics return types, exemptions, income deductions, sales and exchange of assets and credits. Emphasis is placed on problems to demonstrate the application of the principles studied and use of official forms for demonstration purposes. Prerequisites either 311 or 312.

413 Business Information Systems 3 cr

A course designed to introduce students to management information processing systems and the transformation of information systems to meet specific types of informational requirements. Topics include data base concepts, file storage considerations, data base methodology, design implementation and management considerations of business data systems. The course presumes a familiarity with basic computer programming and accounting 211 212.

414 Seminar in Accounting 3 cr

This course is designed to develop a student's ability in technical expression, deepen his understanding of accounting theory and acquaint him with contemporary accounting problems and literature. Students are made acquainted with the philosophy and methodology of research and required to prepare a research paper. Prerequisites 314.

FINANCE CURRICULUM

Students who desire to function in finance, either in the world of private business, government bodies, or in the area of securities are encouraged to select from the several groups of courses that place emphasis on specific material leading to that end. The professional designation of Chartered Financial Analyst (CFA) is used by those in the securities industry. The designation in the life insurance area for professional personnel is (CLU) or Chartered Life Underwriter.

331 Business Finance 3 cr

The aim of this course is to combine the study of material and external sources of funds with the tools of financial management in order to maximize the wealth of the business entity. Primary attention is given to private business entities. While many of the tools and instruments used in the demonstrations are those of large business concerns, entities of all sizes are covered. Special attention is given to the decision-making process as applied to the finance function of business. Emphasis is given to the student's financial planning. Prerequisites 211 212 or the equivalent.

332 Money and Banking 3 cr

To develop knowledge about the role of financial institutions in our society as they perform their function either the creation of the medium of exchange or of taking existing funds from sources of excess to sources of supply. Further to develop an understanding of the construction of the portfolios of the institutions in order to understand why each employs their available funds as they do. Knowledge of interest, rate movements and their effects on business and the development of financial instruments used within the business society. Also through the media of a research paper the student has the opportunity to develop a major area in detail. Emphasis is primarily on the role money and banking take in relationship to business entities.

333 Financial Management 3 cr

The course is designed to provide a theoretical or conceptual framework that a financial manager can use to reach decisions. Material is presented with the purpose of involving the student in the fundamental decisions and compromises of the financial manager as he faces choices between risk and return. Reading material, case materials and a research project to be used. Prerequisites 311.

334 Risk Management 3 cr

A study of the broad spectrum of risk exposures in business enterprise with special attention to the need for identifying these in terms of nature and magnitude. Emphasis is on techniques available to aid the decision-maker in making decisions under constraints of uncertainty. Methods of alleviating avoidance and insurance are studied. Attention is given not only to the traditional forms of insurable hazards but also to the implicit risks such as those of loss in market value of assets, capital budgeting decisions, new product financing techniques, mergers, and other areas where risk is present in the decision. Prerequisites 331.

336 Security Analysis 3 cr

An intensive study of the analytic techniques applicable to the selection of the various types of securities of private as well as public entities. Consideration is given to the markets in which these securities are traded and the types of information that are useful and necessary to the decision-making process of the investor as the attempt is made to measure the value of a particular security. Several models are examined in seeking their applicability and in demonstrating the relative worth of a security. The merits of both the fundamental and technical approach to security analysis are considered for their contribution to the analysis of a security. Prerequisite 331.

337 Investment Analysis 3 cr

It is the aim of this course to present material that will be useful to the student in developing an
understanding of the various types of investments which may be available for a portfolio investment. Discussion of the various risks that a portfolio be subject to and further the importance of the various risks to the various types of portfolio holders is under taken. The basic elements of portfolio theory are presented. Various quantitative and descriptive approaches that are designed to investigate Techniques for measuring the effectiveness of the portfolio are illustrated. Prerequisites 331 336 or special permission of the instructor without 336

432 Credit Management 3 cr
This course will be taught in such a manner as to give the student a thorough understanding of the function of credit management. In order that the student be afforded a maximum opportunity to grasp such information as presented in the literature and in the classroom, cases problems and field experiences may be assigned. Through these vehicles the student will have the opportunity to integrate the knowledge gained from text material and other financial sources with that of other disciplines to arrive at a logical sound credit decision. Prerequisite 331

433 Financial Markets 3 cr
An extensive and intensive study of the markets in which the financing of needs takes place. Study is made of the markets for borrowing and lending of capital both short-term and long-term. Financial institutional structures are given emphasis as they act and interact when serving as sources of intermediaries and users of funds. Research by the student is required to afford the student the opportunity to concentrate on an intensive effort upon an individual topic. Prerequisite 331

434 Life Insurance 3 cr
A study is made of the risks of death and longevity as they occur in personal and business situations. Analyses are made of various forms of life-insurance and annuity contracts and their uses with emphasis upon their functions as instruments of estate creation and administration. Uses of insurance in connection with partners and key men and in connection with bank loans are explored. Attention is given to accident and health coverage, group plans, pensions and regulation of the industry. Prerequisite 331

435 Property and Liability Insurance 3 cr
A study of the problems involved in financing residential commercial and industrial real estate from the points of view of both owner and lender. Methods of financing covered include use of individual and business equity, loans secured by mortgages, land contracts, sale-and-lease-back arrangements, and cooperatives. Syndicates and real-estate trusts. Attention is given to procedures for originating servicing and foreclosing loans and mortgage arrangements by principals agents and mortgage bankers. Case problems either in class or in the field type are used to illustrate the techniques employed in determining the feasibility of a location. Special attention is devoted to an intensive research project in some area of interest to the student as related to real estate. Attention is also given to the requirements necessary to sit for the Pennsylvania Real Estate Sales License. Prerequisite 331

439 Seminar in Finance 3 cr
Concentrates upon selected contemporary topics presented by distinguished visiting professors of finance or resident faculty. Offered on occasion and open only to senior students.

QUANTITATIVE METHODS CURRICULUM
Students in the undergraduate School of Business and Administration complete a basic sequence in Quantitative Methods. This sequence is concerned with the application of mathematics, statistics, and electronic data processing to the analysis of business and economic problems. The objective of the program is to increase the student's knowledge and understanding of the uses of mathematics, statistics, and computers as aids in decision-making. The basic sequence is comprised of these courses 181 281 282 and 381. Prior to entry into the sequence, Mathematics 109 and/or 111 in the College may be required of those students failing to satisfy entry requirements with respect to competence in basic algebra and calculus.

In addition to the basic sequence, a number of electives are offered for students wishing to include quantitative management science techniques in their areas of concentration.

181 Introduction to Computers 3 cr
An introduction to the basic concepts of computer programming in algebraic and representational languages. The course introduces the algorithmic approach to problem-solving and continues through the development of flowcharts and programs using the FORTRAN language. Brief treatment is also given to other business related languages. Prerequisite Mathematics 109 in the College or equivalent.

281 282 Probability and Statistics 3 cr each
This sequence includes the basic ideas of descriptive statistics, inductive statistics, and probabilistic theory. Probability distributions, sampling distributions, statistical estimation, testing of hypotheses, time series analysis, simple linear regression and correlation. Prerequisites 181 and Mathematics 111 in the College or equivalent.

381 Introduction to Decision Sciences 3 cr
The application of the scientific method of problem solving to business problems. The course includes various models and the methods of applying them to business situations. The models covered include linear programming, simulation, queuing and inventory optimization. The use of library computer programs will be emphasized. Prerequisites 281 282

382 Data Processing with COBOL
The development of data processing management systems.

DIVISION OF BEHAVIORAL SCIENCE

PROGRAM GUIDE
The present combination of required courses and free electives gives the student a solid foundation in business and at the same time allows him to follow his inclination in a special field of endeavor. At the same time the greater the freedom of choice, the greater the need for helping the student in selecting courses in a meaningful way. Students should be aware that they can use this freedom either:

1. To broaden their cultural background by expanding in many different fields of knowledge or
2. To extend with the help of their advisor a background of specialized knowledge in the field in which they have their strongest interest.

Several Study Programs—combining a concentration in Business (24 credits) with a judicious choice of electives from the College (27 credits)—are given as illustrations of the flexibility and the depth possible under the present program. Presently Study Programs are offered in:

- Industrial Relations
- Law Administration
- Production
- Transportation and Traffic

The listing of these Study Programs is only indicative. Other areas may be modified according to the occupational objectives and preferences of the student.

INTERNATIONAL BUSINESS CURRICULUM

141 Physical and Economic Geography 3 cr
This course introduces the student to the study of the world's major geographic regions. It is assumed that the student has a knowledge of natural resources in earning a living. Attention is given to the geographical foundations and operations of major industries including agriculture, manufacturing, extractive activities and transportation. Principal domestic and world trade activities are analyzed.

142 Economic Development of Europe and America 3 cr
A survey of the evolution of Western economic institutions and business practices. The origin of capitalism, the Commercial and Industrial Revolutions, the rise of the bourgeoisie and the spread of capitalism are examined. A study is also made of the institutional development and the productive growth of the United States economy. Emphasis is placed on analyzing economic issues, particularly the evolution of business institutions within a historical context.

441 International Business 3 cr
A study of the techniques of the international trade. Emphasis is given to the contract, overseas equipment, customs procedures in this country and abroad, marine insurance, packing, overseas trade financing and exports, shipping, and carriage of goods by air. Prerequisites 281 282

442 International Economics 3 cr
This course is an introduction to international trade theory and the principles of international monetary economics as well as foreign trade policies. Topics to be discussed include the classical and neo-classical theory of comparative advantage, foreign exchange markets and balance of payments adjustment mechanisms, analysis of the consequences of trade regulation and international liquidity problems. Prerequisites 281 282

LAW ADMINISTRATION CURRICULUM
This curriculum is designed to prepare professionals to aid in the solutions of one of society's most critical problems—that of the administration of legal systems. Future executives in court management, correctional institutions, and law enforcement receive a broad interdisciplinary educational experience with the basic core coursework in the School of Business and Administration. Other coursework may be appropriate to fit a student's career objective. Counselors and school officers should be consulted.
The curriculum of the School of Business and Administration meets the requirements for registration for general purposes of the State Board of Law Examiners in Pennsylvania and of the State Education Department of New York. Coursework in the various areas of the School of Business and Administration provides good preparation for the professional study of law.

251 Legal Process 3 cr
An introductory course exploring the nature of law in its relation to society, and government. The relation of the judicial to the executive legislative functions, and an instrument of social change and control, understanding of the legal rights and duties of persons. Acquaintance with areas of legal concern to the administrator such as labor environmental controls. Products liability, anti-trust concerns such as pricing and mergers.

353 Contracts 3 cr
Study of the law pertaining to the formation of contracts, the legal requisites of a enforceable agreement, the transfer of contractual rights and duties and the discharge of contracts. The relationship between principal and agent. Prerequisite: 251.

354 Commercial Transactions 3 cr
Study of the provisions of the Uniform Commercial Code with reference to the nature and legality of sales of goods, the formality of sale contract, transfer of title to goods, warranties, nature and kinds of commercial paper, requisites and meaning of negotiability. Methods of transfer. Prerequisite: 251.

355 Law of Business Organizations 3 cr
Consideration of the nature, creation and dissolution of the proprietorship, various types of partnerships, unincorporated organizations, and the corporate organization. Duties, rights, remedies, and liabilities of owners and managers. Prerequisite: 251.

361 Principles of Management 3 cr
This course represents an introduction to the essential principles of management centered around the concept of management being a basic process which is distinct and applicable to all enterprises. Planning, organizing, actuating, and controlling comprise the fundamental functions of management making up the management process. These functions constitute the framework around which this course is built. Emphasis is given to planning which is rapidly growing in managerial importance. Decision making, managerial creativity, and the art of management are thoroughly developed.

362 Behavioral Science 3 cr
This course is an introduction to the scientific study of behavior. It incorporates concepts from the disciplines of anthropology, psychology, sociology, economics, law, and political science as well as from the newer fields of organization theory, game theory, and decision theory. This interdisciplinary approach to behavior provides an integrative framework for transfer to any organizational setting. Prerequisite: 251.

363 Production Management 3 cr
A follow up course to Principles of Management in which all important phases of management are developed. Topics such as purchasing, inventory control, motion and time study, plant layout, pricing, etc. are covered. Other related organizational problems.

462 Public Administration 3 cr
This course introduces the student to the concepts of public management and to the work of the public manager, at federal, state, and local government levels. It also compares and contrasts public and private management and links management theory and practice. Lecture-discussion and participative methods are employed. Prerequisite: 361.

463 Collective Bargaining 3 cr
Study of the collective bargaining process of substantive issues and administrative aspects of collective agreements. Specific provisions including adjustment of grievances, conciliation, mediation, arbitration, collective bargaining and public policy. Prerequisite: 361.

464 Administrative Organization 3 cr
A course presenting organizational concepts as they relate to the operation of an enterprise. Line and staff functions and relationships are thoroughly developed. Both formal and informal relationships are considered as they are developed and exist within a firm. Authority responsibility delegation, decentralization, and centralization of control and other related organizational problems are considered. Prerequisite: 361.

466 Wage and Salary Administration 3 cr
An advanced course involving treatment of the major wage administration problems. Coverage includes such related and diverse facets of compensation as the analysis of the contemporary concepts of wage and salary administration such as cost of living and merit rating, appraisal of various payment approaches such as incentive programs and skill sharing. Structuring a wage program analysis of the final effects such technically oriented practices have on the functional areas of management. Prerequisite: 361.

491 Executive Action Simulation 3 cr
A course incorporating the Games Theory Approach. The techniques of Case Method and Role Playing are combined in a simulated business environment in which the students make the decisions affecting the conduct of a business. Participants are divided into teams of key corporate duties being assigned and several teams compete against each other in an attempt to operate the firm on the optimal profit business. Prerequisite: Senior standing and 361. Open only to students in the School of Business and Administration.

492 Executive Policy 3 cr
Integrates concepts and skills from all functional areas of business and administration in decision making under conditions of uncertainty. Makes use of case histories and other information to allow students to analyze and solve problems with the organization as a whole. Prerequisites: Senior standing and 361.

493 Independent Scholarly Study 3 cr
Student must initiate an original research project in a field of business of his choice. The project is then scrutinized by a Committee of three faculty members. If the project is approved the Dean will choose a faculty member as director of the project. The project must be completed within an academic year. Prerequisites: Student must qualify as a University Scholar.

494 Field Study 3 cr
Organized group study under specific programs beyond the classroom. Participation will be required to utilize analytical and decision making abilities in projects in an action setting under faculty supervision. Prerequisite: Approval of the instructor.

MANAGEMENT CURRICULUM
In accord with the objectives of the University and of the School the Management Curriculum aims are:

1. To acquaint students with managerial concepts and practices in both profit and non-profit organizations.
2. To offer an opportunity for some degree of specialization to those students who are interested in a study program in management.

361 Principles of Management 3 cr
This course represents an introduction to the essential principles of management centered around the concept of management being a basic process which is distinct and applicable to all enterprises. Planning, organizing, actuating, and controlling comprise the fundamental functions of management making up the management process. These functions constitute the framework around which this course is built. Emphasis is given to planning which is rapidly growing in managerial importance. Decision making, managerial creativity, and the art of management are thoroughly developed.

362 Behavioral Science 3 cr
This course is an introduction to the scientific study of behavior. It incorporates concepts from the disciplines of anthropology, psychology, sociology, economics, law, and political science as well as from the newer fields of organization theory, game theory, and decision theory. This interdisciplinary approach to behavior provides an integrative framework for transfer to any organizational setting. Prerequisite: 251.

363 Production Management 3 cr
A follow up course to Principles of Management in which all important phases of management are developed. Topics such as purchasing, inventory control, motion and time study, plant layout, pricing, etc. are covered. Other related organizational problems.

364 Personnel Management 3 cr
A course presenting techniques of manpower management. Involves study of recruiting and screening techniques, training programs, merit rating, wage plans, safety, disciplinary programming, etc. Current techniques are presented in the form of case material. Prerequisite: 361.

365 Industrial Relations 3 cr
A course developed to present to the student historical knowledge of the labor movement current status and importance in industry and the legal status of labor governing the actions of management in a myriad of ways. Presents the role of labor management and government in collective bargaining and current industrial relations policies and practices. Prerequisite: 361.

461 Human Relations in Administration 3 cr
An advanced course treating of the human aspect of behavior. The emphasis throughout the course is on problem solving and decision making in marketing. The course is systematically planned to give the student an insight into these areas and the reduction of risks experienced in the use of quantitative and qualitative marketing research techniques.

471 Marketing Research 3 cr
This course examines the means and methods functions of marketing. Theories of marketing are subjected to the test of practical examples so that the student may develop a more realistic grasp of the principles involved and the value of the practitioner's judgments. Current marketing developments are studied. Prerequisite: 361.

497 Executive Action Simulation 3 cr
A course incorporating the Games Theory Approach. The techniques of Case Method and Role Playing are combined in a simulated business environment in which the students make the decisions affecting the conduct of a business. Participants are divided into teams of key corporate duties being assigned and several teams compete against each other in an attempt to operate the firm on the optimal profit business. Prerequisite: Senior standing and 361. Open only to students in the School of Business and Administration.

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Student must initiate an original research project in a field of business of his choice. The project is then scrutinized by a Committee of three faculty members. If the project is approved the Dean will choose a faculty member as director of the project. The project must be completed within an academic year. Prerequisites: Student must qualify as a University Scholar.

500 Field Study 3 cr
Organized group study under specific programs beyond the classroom. Participation will be required to utilize analytical and decision making abilities in projects in an action setting under faculty supervision. Prerequisite: Approval of the instructor.
321 National Income Analysis 3 cr
A conceptual analysis of national income theory its tools its basic principles and its social and economic significance. The course treats the macroeconomic method of economic analysis. It is concerned with explaining the development and nature of national income aggregates. The basic principles of national income theory are developed and explained in order to place into focus the operations of the American economy and the many problems relating to it. Prerequisites 221 222

322 Price and Production Economics 3 cr
An intensive study of the theory of demand production and distribution. In addition recent developments in the theory of imperfect competition and oligopoly are carefully examined. Prerequisites 221 222

323 Public Finance 3 cr
A study of the organization and management of government revenues and expenditures with emphasis on American practices and policies at the various levels of government. Benefit-cost and cost-effectiveness analysis with their implications for program and capital budgeting receive heavy consideration. The economic consequences of various tax structures and alternative social-choice mechanisms are studied. Prerequisite 321 or 322

324 Comparative Economic Systems 3 cr
A comparative study of capitalism socialism communism and other economic systems with emphasis on analysis rather than mere description of the economics of various countries. Prerequisites 221 222

421 History of Economic Thought 3 cr
Shows the development of economic thought from the Age of Mercantilism to 1890. Major emphasis is placed upon the writings of Mun Petty Quesnay Smith Ricardo Malthus Marx Leavens and the Austrian School. It offers a study of the fundamental concepts of the writers and the influence of institutional conditions upon their philosophy. Major emphasis is placed upon value and distribution theory as it developed. Prerequisites 221 222

422 Modern Economic Theory 3 cr
A brief review of classical tradition emphasizing Smith Ricardo and Mill and Marxian socialism showing their influence upon the evolution of twentieth-century economic theory. Emphasis is placed primarily upon the writings of Marshall Schumpeter and Keynes applying their theories to the problems of contemporary economic policy. Special emphasis is given to economic growth and development and the essentials of welfare economics in today's society. Prerequisites 221 222

423 Business Cycles and Forecasting 3 cr
This course is designed to study the process of economic change. Analyses of seasonal and secular movements will be undertaken. Theoretical and empirical aspects will be covered. Forecasting techniques will also be studied. Prerequisites 221 222

424 Business and Public Policy 3 cr
A study of the regulatory techniques used by government to influence and modify business behavior. This course also includes an analysis of market structure conduct and performance considerations pertaining to the firm and the industry. Emphasis is given to antitrust laws and special regulatory problems. Prerequisites 221 222

425 Current Economic Issues 3 cr
A seminar-like discussion of the state of the nation's economy and its current problems on the basis of critical examination of professional journal articles and economic reports by official and private sources (such as the President's Council of Economic Advisers). The purpose of the course is to begin developing in the graduating senior the ability to coordinate and apply the analytical knowledge he has acquired during his undergraduate study of economics and related fields of social science and business administration. Prerequisites 221 222

426 Monetary Theory and Policy 3 cr
This course presents the chief theoretical contributions on money. The policy implications of these theories past and present will be emphasized. Concentration will center upon policy proposals and controversy in the monetary field since World War II. The theories and contributions of Hicks Keynes Friedman and Tobin among others are reviewed. The role of interest rate is reviewed along with wage-price controversies international gold flows and the relationships between fiscal and monetary policies. Prerequisites 221 222

427 Theory of Economic Development 3 cr
The course is designed to acquaint students with the area of economic development. The subject matter of this course conveniently divides itself into five major categories: the nature of development and problems of measurement; theories of development; factors and forces affecting economic growth; different approaches to a higher standard of living; and problems of domestic and international stability. Approach to this course encompasses detailed study as well as a strong emphasis on theoretical and critical analysis. Prerequisites 221 222

429 Seminar in Economics 3 cr
The purpose of the seminar is to provide a vehicle for the advanced student to investigate separate subject areas in the field of Economic Theory. The intention is to provide a sound basis for further study at the graduate level. Seminar procedure will stress written and oral reports. Prerequisites 321 322 and permission of the instructor
School of Education

HISTORY
Prior to 1929 teacher preparation courses were offered through a department of the College of Liberal Arts and Sciences at that time the newly-organized School of Education granted its first degrees in programs of secondary education. The following programs have since been approved for certification by the Department of Education of the Commonwealth of Pennsylvania music education in 1930 graduate education 1936 elementary education 1937 guidance 1952 school administration 1952 library science 1936 special education 1964 reading specialist and reading supervisor 1969 school psychology 1969 early childhood education 1975 school supervision 1976

SELECTION AND ADMISSION
Candidates who express a desire to become teachers are admitted to the School of Education through the University Office of Admissions (applying to Director of Admissions, Duquesne University, Pittsburgh, Pa. 15282). The curriculum for the two years is devoted to the broad learnings in general and basic professional education and beginning course work in a major discipline or area of concentration.

The School of Education includes and maintains in its enrollment only those students who give definite indications of teacher potential. Students are therefore expected to demonstrate developing personal and professional characteristics: attitudes and competencies which will recommend them as worthy candidates for the teaching profession. Evaluation and approval by the faculty is based on the student's development of:

1. A well-balanced personality as evidenced through personal appearance, health, and vitality
2. Emotional maturity and control
3. Self-confidence cooperation, judgment and tact
4. Adaptable and resourcefulness, cultural appreciation, and social relationships

Professional Education The basic professional education program introduces the student to the teaching profession through thorough study of the principles and practices of education and the learning process. Specialized courses provide preparation in teaching techniques and methods required for specific fields of concentration—elementary secondary special (mentally handicapped) or special education.

Professional Laboratory Experiences The School has developed and diversified professional laboratory experiences designed to provide opportunities for observing and working with children and youth through various projects in the school:

1. Programs in neighborhood and community centers
2. Observation in public and private school classrooms
3. Group observation in schools and institutions
4. Teacher aide or tutorial service in public and private schools
5. Student teaching in a public or private school for an entire semester or year.

All of these experiences are completed under professional supervision from the University and from the public or private school or off-campus agencies.

CURRICULUM

General Education The School of Education requires completion of the established general education which includes courses in the humanities social sciences natural and behavioral sciences for Catholic students theology.

Professional Education The basic professional education program introduces the student to the teaching profession through thorough study of the principles and practices of education and the learning process. Specialized courses provide preparation in teaching techniques and methods required for specific fields of concentration—elementary secondary special (mentally handicapped) or early childhood education.

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1. Programs in neighborhood and community centers
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4. Teacher aide or tutorial service in public and private schools
5. Student teaching in a public or private school for an entire semester or year.

All of these experiences are completed under professional supervision from the University and from the public or private school or off-campus agencies.

COURSE REQUIREMENTS

GENERAL EDUCATION

The following courses in the arts and sciences are an integral part of each program:

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Area</td>
<td>12</td>
</tr>
<tr>
<td>English Composition</td>
<td>6</td>
</tr>
<tr>
<td>English Elective</td>
<td>3</td>
</tr>
<tr>
<td>Communication Area (Speech)</td>
<td></td>
</tr>
<tr>
<td>Journalism English</td>
<td>3</td>
</tr>
<tr>
<td>Any Combination of Mathematics/Science</td>
<td></td>
</tr>
<tr>
<td>Science/Foreign Language</td>
<td>12</td>
</tr>
<tr>
<td>Social Science</td>
<td>12</td>
</tr>
<tr>
<td>(Anthropology/Economics/Geography/History/</td>
<td></td>
</tr>
<tr>
<td>Political Science/Sociology/Philosophy</td>
<td>6</td>
</tr>
<tr>
<td>Theology</td>
<td></td>
</tr>
<tr>
<td>Minimum of 3 Theology credits</td>
<td></td>
</tr>
</tbody>
</table>

COMPETENCY CORE CURRICULUM

The Competency Core Curriculum consists of 27 credits beginning with Introduction to Education in the freshmen year. Developmental Foundations I II III in the sophomore year and completing with Curriculum and Instruction I II in the junior year. The Competency Core Curriculum focuses on the philosophical and pedagogical foundations needed by entry-level teachers extensive involvement in field experiences beginning with the freshman year and an on-going process of individual guidance and counseling regarding teaching and career decisions.

1. The Competency Core Curriculum is comprised of four domains: 1) Becoming a person 2) Becoming a student of education 3) Becoming an educational theorist, 4) Becoming a practitioner. The Competency Core Curriculum as the title implies is a comprehensive program that is developmental in that it is designed to prepare students to be entry-level teachers in elementary special education.

Courses (Required in all programs)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>215 Developmental Foundations of Education I</td>
<td>4</td>
</tr>
<tr>
<td>217 Developmental Foundations of Education II</td>
<td>4</td>
</tr>
<tr>
<td>315 316 Curriculum and Instruction I</td>
<td>8</td>
</tr>
<tr>
<td>317 318 Curriculum and Instruction II</td>
<td>8</td>
</tr>
<tr>
<td>*In Early Childhood Education 315 316 and 317 318 are not required</td>
<td></td>
</tr>
</tbody>
</table>

EARLY CHILDHOOD EDUCATION

This is a cooperative program approved by the Pennsylvania Department of Education with Carlow College. Some of the professional courses are offered only on the Carlow campus. These 48 credits (semester hours) in addition to 42 credits (semester hours) in Education 11 credits in the Competency Core Curriculum and 19 credits in electives are required for the degree. Credit:

Professional Preparation (Required courses) 18

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>201 Orientation to Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>272 273 Art Music and Physical Education</td>
<td>4</td>
</tr>
<tr>
<td>for the Classroom Teacher</td>
<td></td>
</tr>
</tbody>
</table>

*ELECTIVES

Required courses taken at Carlow College

ELEMENTARY EDUCATION

The following 39 credits (semester hours) in Professional Preparation and 12 electives are required with the 42 credits specified in General Education and 27 in the Competency Core Curriculum comprise this curriculum.

Professional Preparation (All courses Required) 39

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>273 274 Art Music and Physical Education</td>
<td>4</td>
</tr>
<tr>
<td>for the Classroom Teacher</td>
<td></td>
</tr>
<tr>
<td>325 Teaching Reading in the Primary School</td>
<td>3</td>
</tr>
<tr>
<td>326 Teaching Reading in Intermediate and</td>
<td></td>
</tr>
<tr>
<td>Middle Schools</td>
<td></td>
</tr>
<tr>
<td>330 Teaching Elementary Language Arts and</td>
<td>3</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
</tr>
<tr>
<td>331 Teaching Elementary Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>332 Teaching Elementary Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>333 Teaching Elementary Science</td>
<td>3</td>
</tr>
<tr>
<td>484 Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>491 Student Teaching</td>
<td>12</td>
</tr>
</tbody>
</table>

MUSIC EDUCATION

General and professional course work and professional education courses are required for this program. Credit: 3

Professional Preparation (All Courses Required) 18

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>497 Reading in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>Specific Methods Course</td>
<td></td>
</tr>
<tr>
<td>Certification Area</td>
<td>Course Concentration</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
</tr>
</tbody>
</table>

**Certification Area**

**Course Concentration**

**Supporting Courses**

**Electives**

**Profession Preparation**

(All Courses Required) 48

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Credits</th>
</tr>
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<tr>
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<td>273</td>
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<tr>
<td>Teaching the Classroom Teacher</td>
<td>276</td>
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<tr>
<td>Methods in Special Education</td>
<td>325</td>
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<tr>
<td>Teaching Reading in the Primary School</td>
<td>330</td>
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<tr>
<td>Elementary Language Arts and Reading</td>
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<tr>
<td>Elementary Science</td>
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<tr>
<td>Teaching the Mildly Handicapped</td>
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<td>477</td>
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<td>Methods in Special Education</td>
<td>491</td>
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</tbody>
</table>

**Credits**

**No student may register for additional course work during the student teaching semester without permission.**

**TEACHER CERTIFICATION**

Through completion of degree and certification program requirements, a student will be eligible for the appropriate Pennsylvania Instructional I (Professional) Certificate. This certificate is valid for six years of teaching. During that time, to convert the certificate to the Instructional II (Permanent) form, the holder must complete 24 semester hours of post-baccalaureate study and three years of successful teaching in public or private schools in Pennsylvania. All programs are approved by the Pennsylvania Department of Education. Certification in Pennsylvania enables a student to meet certification requirements in various other states. Application for the certificate must be made during the semester in which the student expects to be graduated.

**DUAL CERTIFICATION**

Through advisement, a student may complete requirements in two certification areas such as elementary/early childhood/secondary elementary special education. Such programs require some additional coursework beyond the 120 semester hours for a degree. After completing all other requirements, students may register with appropriate advisement for a nine- and a six-credit student teaching course. Student teaching may be added in both areas is offered during the student's final semester.

**CLASS ATTENDANCE**

The School of Education faculty has determined that the following policy will be in effect for the School of Education and will be adhered to by all professors who teach undergraduate courses. It is presumed that each student in a professional course will normally attend every session. The maximum number of cuts permitted is equated in credit hours not in periods the class meets in other words a student may miss three hours of class time in a three-credit course.

**STUDENT ORGANIZATIONS**

The School of Education includes in its program opportunities for participation in student organizations related to professional educational preparation. Students are encouraged to take an active part in these professional organizations for such interest is interpreted as reflecting social and educational development. The organizations are:

- Duquesne University Chapter of the Council for Exceptional Children
- State and national student organizations in Special Education

**Kappa Delta Epsilon National education sorority**

**Kappa Phi Kappa national education fraternity**

**HONOR AWARDS**

These awards are presented at the annual Honor's Convocation are open to undergraduates in the School of Education.

- Faculty Award for General Excellence in Early Childhood Education
- Faculty Award for General Excellence in Elementary Education
- Faculty Award for General Excellence in Secondary Education
- Faculty Award for General Excellence in Special Education

**Kappa Delta Epsilon National Professional Education Sorority Award** for outstanding member of Alpha Kappa Chapter

**Kappa Delta Epsilon National Professional Education Sorority Award** for outstanding member of Beta Phi Chapter

**Kappa Delta Epsilon National Professional Education Sorority Award** for outstanding member of Kappa Chapter

**Kappa Delta Epsilon National Professional Education Sorority Award** for outstanding member of Delta Phi Chapter

**Lawrence A. Roche Memorial Award** for outstanding achievement in the School of Education

**Philip C. Nathaniel Memorial Award** for outstanding achievement in the School of Education

**Council for Exceptional Children Award** for outstanding work in the organization

**COURSE DESCRIPTIONS**

**EDUCATIONAL FOUNDATIONS AND PSYCHOLOGY**

<table>
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<tr>
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An overview of professional education programs and careers introduces students to the competency-based format of undergraduate curriculums and gives them opportunities to meet faculty and staff in informal information-giving and counseling relationships.

**201 Child Development** 3 cr

Behavior and personality characteristics of children from birth to adolescence as they relate to school and home situations.

**202 Educational Psychology** 3 cr

Exames affects and cognitive development planning and teaching techniques measurement and evaluation and related theories in an experimental learning environment.

**FIELD EXPERIENCE**

1 cr each School and other experience aides or observer. Enrollment with consent of the Director of Student Teaching or a School of Education faculty advisor. One credit each semester to a maximum of five semesters.

**215 216 Developmental Foundations of Education I & II** 4 cr

See description for 217 218

**217 218 Developmental Foundations of Education II & III** 4 cr

Developmental Foundations I and II examine and provide for demonstration of various generic competencies in the areas of physical, cognitive, affective and social development of the individual from birth until late adolescence. The components examine the effects that various social interactions have on the physical, cognitive, affective and social development of all students and the teacher. These components provide for the demonstration of competency in studying the analysis and the managing of these effects. Concurrent with these components is a field placement that requires case studies directed observations data collection and teacher aide experience.

**301 Foundations of Education**

Introduction to the study of the philosophical and historical foundations of education and the relationships between the school and other institutions of society.

**315 316 Curriculum and Instruction I & II** 8 cr

See description for 317 318

**317 318 Curriculum and Instruction III & IV** 8 cr

Curriculum and Instruction I and II focus on the presentation and analysis and demonstration of these generic competencies that directly apply to the design and implementation of effective teaching-learning practices in the classroom. The components specifically address such topics and techniques as educational taxonomies instructional objectives planning the learning classroom management learning centers materials utilization evaluation of learning and grading. These components also include a comprehensive field placement that continues the directed observations and data collection initiated in the Developmental Foundations components and introduces the student to the evaluation of the teaching-learning situations observed and to the self-evaluation process of his/her own development in the four domains of the Competency Core Curriculum. The field placement for these final components includes teaching experience in an actual classroom.
and during the pre-school years ages 3 and 4. The role of the family as primary socializing agent is stressed.

307 Curriculum and Methods for Early Childhood Education with Practicum 4 cr
Study of curriculum methodology and implementation in the nursery kindergarten and primary settings. Students will participate in planning and enact activities for language development, art music, play, social studies, science, and mathematics readiness for children 3-8 years of age. A weekly practicum placement in an Early Childhood setting is an integral part of this course. Prerequisite: 201 (Fall semester only).

308 Curriculum and Methods for Day Care With Practicum 4 cr
Examination of curriculum design and implementation of day care programs serving children from birth-8 years of age. Topics covered include comprehensive curriculum planning, parent communication and involvement, environmental design, staffing patterns and current research on the impact of day care on young children and their families. A weekly practicum placement in a day care setting is an integral part of this course. Prerequisite: 201 (Spring semester only).

310 Curriculum and Methods for Special Programs 4 cr
Examination of the historical development and current status of special education programs designed to provide educational remedial, therapeutic, or early intervention experience to young children. Curriculum design and implementation for such programs will be examined along with the specific responsibilities of the teacher handling the mainstreamed young child. A weekly practicum placement in a setting serving special needs children under 8 years of age is an integral part of this course. Prerequisite: 201 (Fall semester only).

402 Language Development and Reading 4 cr
Emphasis is given to a well-planned oral expression program as a base for successful development of language skills including reading. Current status of reading curricula appropriate to the primary level will be examined in a variety of settings. A one-credit field placement in a primary classroom accompanies the course.

410 Early Childhood Education Teaching Seminar 2 cr
Provides classroom discussion of various student teaching experiences as well as analysis of the goals program designs and curricula of the various early childhood programs in which student teaching is completed. Pertinent topics related to ongoing professional development will be included.

451 Associate Teaching Early Childhood Education 10 cr
Student teaching experience is considered to be one of the most important single elements of the Early Childhood Program. It involves teaching responsibilities in a pre-school primary setting. Application of theory and planning previously studied development of the student's own teaching style under guidance of a cooperating teacher and college supervisors. Verification of student competency will be determined jointly by both the cooperating teacher and the college supervisor. No other credits may be taken while the student is involved in 450 and 451 without special permission of the Director of Early Childhood Education.

ELEMENTARY EDUCATION

273, 274 Art, Music, and Physical Education for the Classroom Teacher 3 cr each
An introduction to the basic principles and concepts of visual arts, physical education, health and music to children of elementary school age including exceptional children.

325 Teaching Reading in the Primary School 3 cr
Major emphasis is on the pre-school, readiness, and primary grade. Content deals with language experience, early reading, and perceptual development in young children and their relationship to the beginning reading program. In addition, consideration will be given to the basic reading skills which comprise the three years of a developmental reading program, techniques of individualizing instruction, evaluating and reporting pupil progress.

326 Teaching Reading in Intermediate and Middle Schools 3 cr
Focuses on the transitional period in a developmental reading program in which reading becomes a tool to be used in each content area. In addition to continuing reading skills in the developmental reading program specialized reading and study skills necessary for students to function in social studies, science, language arts, and mathematics and other content areas will be presented. Techniques of determining readiness of materials, individualizing instruction, evaluating and reporting pupil progress are also studied.

330 Teaching Elementary Language Arts and Reading 3 cr
Presents psychological principles and historical perspectives in the language arts. Foundation on which a good language arts program should be built. Four skills—listening, speaking, reading writing—as acquired by the child, combined with knowledge of the language, the development of language, methods and materials provide a realistic approach to teaching language arts and reading experience.

331 Teaching Elementary Social Studies 3 cr
Provides a combination of theoretical and practical methods which offer multi-level approaches to problem-solving materials and resources inherent in a good social studies program.

332 Teaching Elementary Mathematics 3 cr
Theories of mathematics techniques and content pertaining to mathematics are presented. Emphasis is on exploratory and systematic instructional styles and games as an instructional strategy.

333 Teaching Elementary Science 3 cr
Study of theories, techniques, practices, and content of the science area. Stress is placed on the discovery and development of experimental science teaching techniques. An in-depth study of the process of learning is included. Requirements include laboratory work.

484 Children's Literature 3 cr
A general survey of books and other print materials for children. Criteria for the evaluation and analysis of children's books. Types of books available considered in terms of interest, needs, and abilities of children.

490 491 Student Teaching—Elementary 9 cr
Student teaching in an approved elementary school under the direct supervision of a cooperating teacher. Prerequisites: Senior status, good academic standing completion of required professional courses and recommendation of faculty.

493 Student Teaching—Elementary 6 cr
Student teaching in elementary education for students in the secondary or special education program who wish to complete requirements in two certification areas. Registration is concurrent with Ed 490-Secondary or Ed 490-Special Education.

SECONDARY EDUCATION

215 Teaching Grammar and Composition 3 cr
Deals with various approaches to teaching grammar and composition. Also includes opportunities for students to develop and use different techniques in on-the-job teaching situations.

316 Teaching Secondary Mathematics and Science Education 3 cr
Designed to acquaint the student with methods and materials for teaching specific models of teachable subject matter and field-based activities are explored.

318 Teaching Secondary Foreign Languages 3 cr
Explores a variety of approaches for teaching foreign languages, structure, verbal exercises, and literature given to the specific language to be taught will be discussed.

319 Teaching Secondary Social Studies 3 cr
This is a competency-based subject that develops evaluation skills, knowledge of curriculums, media and technological experiences, and methods. Expands planning and questioning skills.

490 491 Student Teaching—Secondary 9 cr
Student teaching in an approved secondary school under the direct supervision of a cooperating teacher. Prerequisites: Senior status, good academic standing completion of required professional courses and recommendation of faculty.
493 Student Teaching—Secondary 6 cr
Student teaching in secondary education for students in the elementary or special education program who wish to complete requirements in two certification areas. Registration is concurrent with Ed 490-Elementary or Ed 490-Special Education

497 Reading in Secondary Schools 3 cr
A survey course in teaching of reading appropriate for secondary education majors. Major emphasis is on methods of teaching reading the materials for evaluating pupil growth in reading and reading in the content subjects.

SPECIAL EDUCATION

These courses are designed to prepare students for teaching mentally and/or physically handicapped pupils including brain injured, emotionally and socially disturbed learning disabled.

209 Foundations of Special Education 3 cr
Survey of the educational physical psychological and social characteristics of the various types of exceptional persons and methods for meeting their needs. Includes field trips to schools and agencies serving exceptional persons.

211 212 214 Field Experience 2 cr each
Classroom and other experiences in educational social welfare and vocational settings as an observer and participant. Enrollment with consent of Director of Student Teaching and School of Education faculty advisor. Students may choose 211 (Elementary) or 212 (Secondary) which involve the mildly handicapped 213 which is with the severely handicapped or 214 which is with pre-vocational/vocational pupils.

272 273 Art, Music and Physical Education for the Classroom Teacher 3 cr each
An introduction to the basic principles and concepts of teaching visual arts, physical education and music to children of elementary school age including exceptional children.

276 Methods in Special Education I 3 cr
Introduction to management techniques utilized in programs for exceptional persons. Information covering educational assessment procedures designing and implementing individual educational programs and methods for individualizing instruction will be included. Prerequisite 209 or equivalent.

386 Teaching the Mildly Handicapped 3 cr
Evident integration and implementation of theoretically based methodologies curricula, instructional techniques and evaluation procedures for students who have been labeled brain injured, learning disabled mentally retared physically handicapped socially and emotionally disturbed. Prerequisites 209 276

387 Teaching the Severely Handicapped 3 cr
Evaluation and integration of the various theories methodologies curricula, instructional techniques and evaluation procedures for severely handicapped persons labeled brain injured, learning disabled mentally retarded physically handicapped socially and emotionally disturbed. Prerequisites 209 276 or permission of instructor.

388 Vocational Education for the Handicapped 3 cr
Overview of pre-vocational career and occupational education programs to be used for exceptional persons. Students will be given information and experiences enabling them to design and implement instructional programs appropriate to the vocational needs of mentally and physically handicapped pupils. Prerequisites 209 276 or permission of instructor.

477 Methods in Special Education II 3 cr
Development and implementation of an individualized student teaching readiness plan that specializes the management of problem behaviors and development of instructional environments. Includes supervised field experience, independent study and individual learning experiences. Prerequisites 209 276 386

490, 491 Student Teaching—Special Education 9-12 cr
A full semester of supervised classroom experience in a carefully selected school for mentally and/or physically handicapped pupils. Prerequisites senior status good academic standing completion of required professional courses and recommendation of faculty.

493 Student Teaching—Special Education 6 cr
Student teaching in special education for students in the elementary or secondary education program who wish to complete requirements in two certification areas. Registration is concurrent with Ed 490-Elementary or Ed 490 Secondary Education.

School of Music

HISTORY

Duquesne University recognizing that it was most fortunately situated to offer outstanding opportunities for professional preparation in music in 1926 established the School of Music with a four-year course of study leading to the Bachelor of Music degree. The music education program was approved by the Pennsylvania Department of Education in 1930. In 1959 the School became an associate member of the National Association of Schools of Music and in 1966 was elected to full membership. On April 29, 1967 a new air-conditioned music building was dedicated, Van Cliburn was awarded an honorary Doctor of Music degree on this occasion.

PHILOSOPHY AND OBJECTIVES

The administration and faculty of the School of Music believe that the development of the artistic personality is entirely compatible with the objectives of scholars in all fields. It is felt that the best place to educate music students is in a situation in which they have an opportunity to share their academic courses in classes with students from other schools of the University. The great advantage of a solid musical preparation and the opportunity to participate in nationally recognized organizations and in which of professional caliber are available to all students.

The faculty of musical scholars and artists with whom Duquesne students work believe that fine talents are best encouraged and developed in an atmosphere that is friendly. At the same time committed to the development of excellence. The faculty selected with care includes the names of concert and opera soloists, members of the Casals Festival Orchestra, the Pittsburgh Symphony Orchestra, the Pittsburgh Symphony, nationally known composers, authors, arrangers, conductors, clinicians and music educators. The Pittsburgh Symphony Pittsburgh Opera, chamber music and concert series WDUQ (Duquesne University Radio station) and Duquesne University Radio are among the many musical interests the University offers and the various radio and television stations in the arts serve as unusual stimuli to the eager music student. The Symphony Band in its many performances on and off campus presents a wide variety of standard and contemporary repertoires.

The Symphony Orchestra offers fine opportunities for students interested in orchestral literature, association with teachers who are members of the Pittsburgh Symphony Orchestra and in the exceptional advantage. The School also maintains various vocal and instrumental ensembles that are receiving national recognition for the excellence of their performances.

The objectives of the School of Music are to educate teachers and performers of music who should possess a sensitive and intelligent musician and who will be equipped by reason of their general and professional education to accept positions in fields of performance, education or therapy.

ADMISSION

Students who are interested in applying for admission to the School of Music should request an application from the Office of Admissions. Duquesne University Pittsburgh, Pennsylvania 15282. After applications have been processed candidates will receive a request to apply the School of Music to arrange an appointment for an audition and a theory examination. Specific instructions concerning the audition will then be mailed to the applicant. A tape recording will be accepted for those living more than 150 miles from the University. However in the event the recording is not satisfactory, a personal audition may be required.

All applicants will be notified of the status of their candidacy as soon as possible.

Students planning to major in Music are urged to begin study of piano and theory prior to entrance.

ADVISEMENT

At initial enrollment every student is assigned a faculty adviser who provides assistance with academic matters especially during pre-registration periods.

Guidance in professional objectives will also be provided by faculty committees established for that purpose.

SPECIAL FEES

Student Teaching $25.
Instruction in voice or instrument as a major each semester.
Instruction in voice or instrument as a minor each semester.
Piano Class Fee each semester.
Instrumental rental each semester.
Instrument for class use.
Organ practice (major or minor) each semester.
Music School fee.

DEGREES

The School offers programs leading to two undergraduate degrees Bachelor of Music and Bachelor of Science in Music Education. The Bachelor of Music degree will be earned with a major in piano organ voice, orchestral instruments or another major in sacred music with a major in organ or voice. The programs are intended for students interested primarily in performance careers in concert, television, radio, symphony orchestra, opera or teaching in colleges and private studios and for those interested in pursuing careers as church musicians.

Two Music Education programs are offered. One is in general music and the other in music therapy. The former is designed to meet certification requirements for teaching in elementary and secondary schools while the latter leads to certification as a registered music therapist. In order to receive the Music Therapy Degree or its equivalency for certification.
George Barrere Memorial Scholarship. The Pittsburgh Flute Club offers a scholarship in flute in memory of George Barrere, founder of the first flute club in the United States. This $300 scholarship is awarded to a freshman or sophomore flute major.

Polish Arts League Scholarship is made annually by the Polish Arts League of Pittsburgh to an outstanding performer in the School of Music. Preference will be given to a student of Polish ancestry. Other students will not be excluded from consideration.

Louis Tozerer Memorial Scholarship is given to an outstanding junior studying a woodwind instrument.

TEACHER CERTIFICATION
The undergraduate music education program has been approved by the Pennsylvania Department of Education for the issuance of the Instructional I (Professional) Certificate. Application for the certificate must be made in the semester in which the student plans to graduate.

RECITAL ATTENDANCE
All students are required to attend a minimum of 30 recitals and concerts sponsored by the School of Music per year (minimum of 120 by graduation).

OTHER ATTENDANCE REQUIREMENTS
All students are required in addition to attend professional events other than concerts pertinent to their specific areas of study.

THEOLOGY REQUIREMENT
One three-credit course in theology is required of every Roman Catholic student.

PROGRAMS
Students must elect courses through their selection from among nine different programs: four in applied music, two in music education and one in jazz.

HONOR AWARDS
The Dean's Award is presented to a senior music student for general excellence.

The Sedarat Medal is presented to a senior for excellence in violin or piano upon recommendation of the departmental committee.

CONSERVATORY MAJOR IN PIANO

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Freshman Year

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### MAJOR IN INSTRUMENT/CLASSICAL GUITAR

#### Freshman Year

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### MAJOR IN ORCHESTRAL INSTRUMENT/CLASSICAL GUITAR

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### MAJOR IN JAZZ PERFORMANCE

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Courses

MUSIC EDUCATION—MAJOR IN MUSIC THERAPY

See footnotes following Music Therapy Curriculum

Jr Year

Psy 103 Introduction to Psychology 3 (3)
Edu 301 Foundations of Education or* (3) 3
Mus 351 352 History and Literature of Music 2 2
Mus 381 382 String Class 1 1
Mus 281 282 Brass Class or* 1 1
Mus 283 284 Brass Class for Instr Majors 1 1
Mus 440 Jazz Arranging (2) 2
Mus 379 380 Conducting 1 1

*OR 351 Education Psychology 201 Child Development or 202 Adolescent Development

Sr Year

Mus 383 Elementary Methods 2 2
Mus 384 Secondary Methods 2
Mus 481 Percussion Class 1
Mus 490 Student Teaching 6

General Science or Math Elective 3
General Academic Elective 3
General Academic or Theological Elective 3
Art 101 Understanding Art 3
General 492 Creative Personality or 3
General Academic Elective 3
Mus 401 402 Applied Music Major 2 2
Mus 143 143 Ensemble 1 1

*The residence semester may be taken in either the fall or spring of the senior year.

See footnotes following Music Therapy Curriculum

MUSIC EDUCATION—MAJOR IN MUSIC THERAPY

Freshman Year

Eng 101 102 English Composition 3 3
Mus 131 132 Music Theory 2 2
Mus 133 134 Solfegegio 2 2
Mus 101 102 Applied Music Major 2 2
Mus 111 112 Applied Music Minor 1 1
Mus 107 Music Therapy Orientation 1
Mus 124 Music Therapy Practicum 1
Soc 101 Survey of Sociology 3
Mus 121 122 Eurhythmics 2 2
Mus 143 143 Ensemble 1 1

Sophomore Year

Mus 231 232 Music Theory 2 2
Mus 233 234 Solfegegio 2 2
Hist 111 112 Western Civilization 3 3
Psych 103 Introduction to Psychology 3
Mus 124 124 Music Therapy Practicum 1 1

Semester

*The residence semester may be taken in either the fall or spring of the senior year for keyboard majors only

Junior Year

Ed 309 Foundations in Special Education 3
Mus 351 352 History and Literature of Music 2 2
Mus 315 Piano Improvisation for Therapy or Instrumental Class Methods of your choice
Ed 202 Educational Psychology 3
Ed 002 Drug Abuse 1
Mus 308 Influence of Music on Behavior 2
Mus **301 302 Applied Music 2
Mus 124 124 Music Therapy Practicum 1 1
Mus 143 143 Ensemble 1 1
Phys 374 Music for the Exceptional Child 3
Mus 185 186 Voice Class 1

Senior Year

Mus 379 Conducting I 1
Gen 379 Academic Elective 3
Psych 352 Abnormal Psychology 3
Bio 207 Anatomy and Physiology 3
Mus 307 Psychological Foundations of Musical Behavior (2) 2
Mus 309 Directed Study—Music Therapy (2)
Mus 124 124 Music Therapy Practicum 1 1
Mus 340 Orchestration 1
Mus 401 402 Applied Music Major 2 2
Mus 310 Recreational Instruments 1
Mus 143 143 Ensemble 1 1

*Electives in psychology will be selected following consultation with advisor.
**In accordance with the recommendations made by the School's faculty the National Association for Music Therapy and taking into consideration performance needs of music therapists the applied music requirements for therapy majors are altered in this manner. Upon satisfactory completion of the first two years as an applied major on the instrument of the individual's choice determined by audition and juries with the appropriate music faculty the student may study one or several instruments for the remaining two years. This will enable the student to develop a degree of versatility which can be of considerable use in the practice of music therapy.

COURSE DESCRIPTIONS

APPLIED MUSIC

101 102 201, 202 301 302 401, 402
Applied Music Major for the Bachelor of Science in Music Education 2 cr each
The study of voice piano organ string wind or percussion instruments throughout all semesters

103, 104 203 204 303 304 403, 404
Applied Music Major for the Bachelor of Music 2 or 3 cr each
Private study of voice piano organ string wind or percussion instruments throughout all semesters

Credits are distributed according to departmental curricula

The candidate for the Bachelor of Music degree must give a recital during the senior year. The recital will be presented to a faculty committee for approval at least one month prior to the date of the performance.

111 112 211 212, 218 219 311 312
Bachlor Degrees 1 cr each
All students must choose an applied music minor upon entrance. Those students who do not elect piano as a major must study it as a secondary instrument.
Students not majoring in piano must satisfy the following piano requirements before graduation (a) construct and play with facility major and minor scales and cadences in all keys (b) read simple four-part music (c) play a simple Clementi sonatina and excerpts from Schumann’s Album for the Young or their equivalent. A student majoring in piano or organ will select an applied music minor with the guidance of his advisor. Students who fail to meet the minimum requirements in the time allotted for their particular degree must continue study until the requirements have been fulfilled.

118, 119 218, 219 Applied Music Minor—Jazz
For non-piano majors jazz piano techniques including comping harmonic continuity through common chord progressions using triads and 7th chords may include more advanced comping harmonic continuity through standard jazz songs and harmonic extensions of 9ths, 11ths, and 13ths.

400 Recital 2 cr Transfer of Applied Music Credit Transfer credit in the undergraduate Applied Music program can be granted only after the student’s proficiency has been evaluated by a faculty panel in the student’s area of specialization.

Changing Assigned Applied Music Teacher Changes in assigned teachers can become effective only at the beginning of a new semester and cannot be accomplished while a semester is in progress. The student must discuss the feasibility of a proposed change with the appropriate chairman.

BACHELOR OF MUSIC

Bassoon

171 Bassoon Reed-Making No Credit
A course designed to encourage one’s own reed-making. Includes the various aspects of shaping, soaking, and trimming the cane.

103 104 3 cr each Scales and arpeggios in all keys. Kovar scales five note studies and interval studies: selected studies and Weissenborn and Milde solos by Weissenborn Foret and Mouquet.

203 204 3 cr each Continue scales and arpeggios Kovar technical studies. Obourauds Scales and Daily Drills Milde Concert Studies. Handel Sonata in C minor solos by Bozza and Vitali.

303, 304 3 cr each Obourauds Scales and Daily Drills Milde Concert Studies. Orfeo Bravura Studies selected passages from the Bach Cantatas Mozart Concerto in B flat. Beethoven Quintet representative contemporary solos orchestra studies.

303 304 3 cr each Gambaendo Etudes for Bassoon. Bozza Fifteen Daily Studies. Sonatas by Hindemith and Saint-Saens orchestra and chamber music studies Bozza Concerino the contra bassoon.

Clarinet

103 104 3 cr each Scales and arpeggios in various articulations. Langenus Scale Studies Rose Forty Studies Cavallini Thirty Caprices Weber Fantasy Le Fevre Fantaisie Caprice J Albert 24 Varied Etudes H Klose Part II.


303 304 3 cr each Obourauds Scales and Daily Drills. Milde Concert Studies selected passages from the Bach Cantatas Mozart Concerto. Beethoven Quintet Weber 2nd Concerto Brahms Sonatas French Contemporary solos representative contemporary solos orchestra studies.


Double Bass

103 104 3 cr each Scales and intervals in all keys. Simandl Thirty Etudes. Selected pieces orchestral studies.

203 204 3 cr each Marie Eight-six Etudes. Short pieces by Koussevitsky and Bottesini. Orchestral studies.

303 304 3 cr each Nunny Etudes de Kreutzer et de Fiorillo concertos by Koussevitsky Dittersdorf and Bottesini Orchestral studies.

403 404 3 cr each Nunny Dix Etudes Caprices Storch Twenty Concert Etudes concertos by Koussevitsky and Dragonei Orchestral studies.

Flute


403 404 3 cr each Taftannel-Gaubert Scales the half note equals MM. 120 scales in thirds. sixths octaves and tenths. Moyse De la Sonrente Mechanism and Chromatics Anderson Etudes Artistiques Op 15 including the memorization of certain selected studies. Anderson Op 63 Jeanjean Etudes Modernes Orchestral Studies Bach Sonata in A minor for unaccompanied flute. Sonatas by Hindemith Remacle Concerto by Ibert works by representative contemporary composers.

Guitar— Classical

103 104 3 cr each Evaluation of student’s abilities and basic corrections if necessary. Scales major and minor up to four sharps and flats. Carcassi Method selected studies from Carcassi Twenty-Five Etudes Op 60 Renaissance dances works by Carulli Amando Sor.

203 204 3 cr each All Scales major and minor two and three octaves. Henze Method Sor Concert Etudes one suite and selected pieces from the Renaissance and Baroque works by Luis Milan Tarrega Ponce and Villa-Lobos.

303 304 3 cr each Continuation of technical studies of the first two years. lute music transcribed for guitar. Dowland Bach Sor Concert Etudes and Sonatas chamber ensemble works by Boccherini Schubert Schuedel Ibert Paganini.

403 404 3 cr each Bach suite a sonata or suite by a 20th-century composer. concerto by Vivaldi Giuliani Carulli. or by a 20th-century composer.

Guitar—Jazz

103, 104 3 cr each Evaluation of student’s abilities basic technique and reading abilities including reading knowledge through VI positions. Major scales in all positions. Berklee Method Book I and Melodic Rhythm Studies Book by William G Leavitt. basic chord theory. basic position. folk chords and alterations. all bar chords and a working knowledge of basic jazz chord forms. beginning study of chord-melody solo playing and single-note techniques. standard guitar solos.

203, 204 3 cr each Continue single-note technique. chord studies. major and minor scales continue chord-melody playing. Joe Pass Guitar Style. Improvised Chord Solos and Single Note Improvised Solos. Books intensives rhythm jazz chord studies (may use Bucky Pizzarelli or A Touch of Glass or Ronny Lee’s jazz guitar method.


Harp


Horn


303 304
Alphonce Deux Cent Etudes Nouvelles Kopparsch Studies Gallay Twelve Caprices Beethoven sonata Mendelssohn Concerto Rondo orchestral studies

303 404
Alphonce Deux Cent Etudes Nouvelles Studies Gallay R Strauss Concerto Saint-Saens Morceau de concert Schumann Adagio and Allegro Dukas Villanelle orchestral studies

103 104
Review of basic technique Barret Studies Andraud Vade Mecum scales and arpeggios in all keys Telemann Sonata in A minor solos by Schumann Handel and Bach

203 204
Continue scales and arpeggios including scales in thirds and measured trills Barret Grand Etudes and Duets Andraud Vade Mecum Bleuet selected studies from Technique of the Oboe Handel sonatas Marcello Concerto

303 304
Continue scales and arpeggios Bleuet selected studies for range and endurance" orchestral studies Cimarosa Concerto Paris Conservatory solos representative contemporary compositions

403 404
Fundamental snare drum technique and its application to musical notation exercises in rhythm reading control Elements of tympani technique their application to classical literature tuning Rudimentary xylophone technique scales arpeggios forms

103 104
Advanced snare drum studies repertoire Three and Four tympani exercises orchestral literature Intermediate xylophone studies transcription for solo

303 304
Tympani study through romantic and contemporary literature Advanced xylophone exercises transcriptions Latin American instrumental techniques use of special accessories in late 19th and 20th century literature Repertoire in all instruments

403 404
Fundamental snare drum technique and its application to musical notation exercises in rhythm reading control Elements of tympani technique their application to classical literature tuning Rudimentary xylophone technique scales arpeggios forms

303 304
Tympani study through romantic and contemporary literature Advanced xylophone exercises transcriptions Latin American instrumental techniques use of special accessories in late 19th and 20th century literature Repertoire in all instruments

Organ

103 104
Review of basic organ technique Selected works from the early English Italian German and French schools Bach Orgelbuchlein selected preludes and fugues Vierne 24 Pieces Langlais Dupre Organ Class I Pedal Scales in all major keys pedaling alone Hymn playing modulation transposition counterpoint and figured bass Continued harmonization of simple melodies

203 204
Selected works by Brahms Mendelssohn Schumann Hindemith Joseph Wilcox Jenkis Six Pieces Dupre Antiphons Messiaen Le Banquet Celeste or Ascension Suite movts I or A Langlais Franck Schroeder or Pepping Vierne Pieces de Fantaisie Bach Orgelbuchlein Schubler Chorales Concerti Preludes and Fugues Trio Sonatas

Organ Class II: Continuation of pedal scales hands and feet Hymn playing Modulation transposition counterpoint and figured bass Continued harmonization of melodies Score and clef reading

303 304
Selected works by D Aquin deGrigny Handel Mozart Sweelinck Franck Langlais Messiaen Bach Preludes and Fugues Trio Sonatas Orgelbuchlein Great 18 chorales Works by contemporary American composers

Organ Class III: Continuation of pedal scales hymn playing accompaniments transposition figured bass clef reading in open score conducting from the console

303 404
Franck Chorales Messiaen Nativity Liszt Dupre Durufle Langlais Vierne and Widor Symphonies Alain Tournemire and selected works by contemporary composers Bach Passacaglia and Fugue extended Preludes and Fugues Claverubang Part III selections Recital

311 432 Organ Improvisation 2 cr each
A practical application of the basic tools of improvisation including harmonization of melodies at the organ and the use of two and three voice counterpoint in varying styles Short ABA forms and chorale preludes with emphasis on their liturgical application

413 Organ Pedagogy 2 cr each
Students learn through demonstration the philosophies methods and materials of teaching both beginning and advanced students Junior standing is required

Percussion

103 104
Fundamental snare drum technique and its application to musical notation exercises in rhythm reading control Elements of tympani technique their application to classical literature tuning Rudimentary xylophone technique scales arpeggios forms

203 204
Advanced snare drum studies repertoire Three and Four tympani exercises orchestral literature Intermediate xylophone studies transcription for solo

303 304
Tympani study through romantic and contemporary literature Advanced xylophone exercises transcriptions Latin American instrumental techniques use of special accessories in late 19th and 20th century literature Repertoire in all instruments

403 404
Examination of representative solo material for all percussion instruments preparation of solo for recital

Piano

103 104
Bach Three-Part Inventions Haydn and Mozart selected sonatas Beethoven Op 10 and Op 14 Chopin waltzes mazurkas nocturnes selections from modern repertoire Major scales in different rhythms and tempo and diminished arpeggios

203 204
Scarlatti selected sonatas Bach Well-Tempered Clavier Beethoven Op 22 Op 31 Chopin preludes impromptus and nocturnes Brahms Intermezzos Rhapsodies selections from Impressionistic and Contemporary repertoire All major and minor scales dominant and diminished seventh arpeggios

303 304
Bach French Suites Partitas Well-Tempered Clavier Beethoven sonatas of the difficulty of Op 10 No 3 Chopin Scherzi Ballades and Etudes Schumann Fantasy Stücke Papillons Debussy Preludes selected Contemporary repertoire Continue scales and dominant and diminished seventh arpeggios plus major and minor arpeggios

313 Piano Pedagogy I 2 cr each
Students will be acquainted with the techniques and materials for teaching piano at the elementary level For piano majors junior standing is required

314 Piano Pedagogy II 2 cr each
A continuation of 313 concentrating on the techniques and materials for teaching piano at the intermediate and advanced levels

243 244 343 344 Piano Accompaning I cr each
This course is designed for the undergraduate with the purpose of affording the student instruction in the piano accompanying

403 404
Bach English Suites Partitas Toccataas Well-Tempered Clavier Beethoven sonatas from middle and late periods more extensive compositions from the Romantic Period Ravel Jeu de d'eau Debussy Etudes at least on work selected from the standard concerto literature contemporary literature Continue scales and arpeggios

303 304
Mute Scales and Arpeggios Small 27 Melodious and Rhythmic Exercises Labanchi-Lasilli 33 Concert Etudes Vol I Concertino by Mulchaud

203 204
Mute Scales and Arpeggios Vol II Lamberge 18 Studies for Saxophone Salviani-Lasilli Exercises in the art of piano accompanying

303 304
Mute Scales and Arpeggios Vol III Left 24 Etudes Capella 20 Grand Etudes Bozza 12 Etudes Bozza Concertino Ibert Concertino

403 404
Rascher Top Tones and Four Octave Studies Mulihaud

303 304
Scales and Arpeggios Vol III Left 24 Etudes Capella 20 Grand Etudes Bozza 12 Etudes Bozza Concertino Ibert Concertino

403 404
Rascher Top Tones and Four Octave Studies Mulihaud

403 404
Gaetke Lip Flexibility La Fosse Complete Method for Trombone Blazhevich 26 Sequences in Bass Tenor and Alto Clefs Rimsy-Korsakov Concert Hindemith Sonata Gondahl Concerto Blazhevich Concerto No 2 orchestral studies of bass trombone

Trumpet

103 104
Schlossberg Daily Drills Arban Complete Method for Trumpet Sachse One Hundred Etudes Brandt Orchestral Studies D Ollone Solo de Trompete Videl Concertino

203 204
Schlossberg Daily Drills Sachse One Hundred Etudes Brandt Orchestral Studies Bousquet Studies Enesco Concerto Sowerby Sonata

303 304
Pettsch Study Studies Brandt Orchestral Studies Hindemith Sonata for Trumpet Persichetti The Hollow Men Intrada by Honegger

403 404
Scales and Arpeggios in all keys review of tone production Rochut Melodious Studies Vol I Blume Studies Vol I selected solos

303 304
Scales and arpeggios in all keys with various articulations Rochut Melodious Studies Vol II Blume Studies Vol II selected solos orchestral and band studies

303 304
Rochut Melodious Studies Vol III Blume Studies Vol III Blazhevich Seventy Etudes Eby Bass Studies selected solos orchestral studies

403 404
Mute Scales and Arpeggios in all keys by Rochut Melodious Studies Vol IV Blume Studies Vol IV selected solos

403 404
Gringonev Tuba Studies Bernard Etudes and Exercices for Tuba transcriptions of horn and violin cello literature solos by Camer Barat Schroen orchestral literature

La Fosse Sight Reading Studies Rochut Melodious Studies Vol I Blume Studies Vol II Kopparsch Studies Vol I study of tenor clef Guiltain Morceau Symphonique Ropartz Andante and Allegro orchestral and band studies

403 404
Gaetke Lip Flexibility La Fosse Complete Method for Trombone Blazhevich 26 Sequences in Bass Tenor and Alto Clefs Rimsy-Korsakov Concert Hindemith Sonata Gondahl Concerto Blazhevich Concerto No 2 orchestral studies of bass trombone

Trumpet

103 104
Schlossberg Daily Drills Arban Complete Method for Trumpet Sachse One Hundred Etudes Brandt Orchestral Studies D Ollone Solo de Trompete Videl Concertino

203 204
Schlossberg Daily Drills Sachse One Hundred Etudes Brandt Orchestral Studies Bousquet Studies Enesco Concerto Sowerby Sonata

303 304
Pettsch Study Studies Brandt Orchestral Studies Hindemith Sonata for Trumpet Persichetti The Hollow Men Intrada by Honegger

403 404
Scales and Arpeggios in all keys review of tone production Rochut Melodious Studies Vol I Blume Studies Vol I selected solos

303 304
Scales and arpeggios in all keys with various articulations Rochut Melodious Studies Vol II Blume Studies Vol II selected solos orchestral and band studies

303 304
Rochut Melodious Studies Vol III Blume Studies Vol III Blazhevich Seventy Etudes Eby Bass Studies selected solos orchestral studies

403 404
Mute Scales and Arpeggios in all keys by Rochut Melodious Studies Vol IV Blume Studies Vol IV selected solos

403 404
Gringonev Tuba Studies Bernard Etudes and Exercices for Tuba transcriptions of horn and violin cello literature solos by Camer Barat Schroen orchestral literature
Viola

101 102 3 cr each

Scales and arpeggios in three octaves selected scales in thirds sixths and octaves. Flesch Scale Studies Sevcik Studies (Lifshey) Campagnoli Forty-one Caprices Fuchs Twelve Caprices Enesco Concert Piece

201 204 3 cr each

All major and minor scales and arpeggios scales in thirds sixths and tenths. Selected studies from Rode Caprices Hermann Six Concert Studies Op. 18 Concertos by C.P.E. Bach and Hoffmeister Vaughan-Williams Suite Sonata by Milhaud parts from orchestral and chamber music literature

301 304 3 cr each

Continue scales and arpeggios. Selections from Rode Caprices and Gavines. Twenty-four Matinees Sonatas by Brahms and Creston. Viola parts from orchestral and chamber music literature

403 404 3 cr each

Selected Studies from Paganini Caprices Reger Three Suites. Bach unaccompanied violin or violoncello works transcribed for viola. Bloch Suite for Viola concertos by Bartok, Walton, Porter

406 407 3 cr each

Scales and arpeggios in three octaves in thirds sixths octaves sixths and octaves. Chromatic scales and sevenths arpeggios. Franchetti Twelve Caprices Dupont Etudes Concertos by Romberg Popper and Saint-Saens. sonatas by Boccherini and Haydn. Orchestral studies. Contemporary works

88

89

Viola

101 102 3 cr each

Scales and arpeggios in three octaves selected scales in thirds sixths and octaves. Flesch Scale Studies Sevcik Studies (Lifshey) Campagnoli Forty-one Caprices Fuchs Twelve Caprices Enesco Concert Piece

201 204 3 cr each

All major and minor scales and arpeggios scales in thirds sixths and tenths. Selected studies from Rode Caprices Hermann Six Concert Studies Op. 18 Concertos by C.P.E. Bach and Hoffmeister Vaughan-Williams Suite Sonata by Milhaud parts from orchestral and chamber music literature

301 304 3 cr each

Continue scales and arpeggios. Selections from Rode Caprices and Gavines. Twenty-four Matinees Sonatas by Brahms and Creston. Viola parts from orchestral and chamber music literature

403 404 3 cr each

Selected Studies from Paganini Caprices Reger Three Suites. Bach unaccompanied violin or violoncello works transcribed for viola. Bloch Suite for Viola concertos by Bartok, Walton, Porter

406 407 3 cr each

Scales and arpeggios in three octaves in thirds sixths octaves sixths and octaves. Chromatic scales and sevenths arpeggios. Franchetti Twelve Caprices Dupont Etudes Concertos by Romberg Popper and Saint-Saens. sonatas by Boccherini and Haydn. Orchestral studies. Contemporary works

88

89
101, 102 2 cr each Lariviere Exercises and technical studies Standard orchestra parts Bochsa Etudes opus 318 Book II Pieces grade of difficulty of Grandmère Ana in Classic style Tourtier Images (Suite I) Saint-Saëns Fantasie

201, 202 2 cr each Technical studies Bochsa Etudes opus 62 Standard orchestra cadenzas Pieces grade of difficulty of Tourtier Feerio Rousseau Variations Pastoralizes Grandmère Fantasie on a Theme of Haydn

301, 302 2 cr each Technical studies Orchestra parts Bochsa Etudes Opus 34 Pieces grade of difficulty of Hindemith Sonata Handel Concerto in Bb major Ravel Introduction and Allegro

401, 402 2 cr each Technical studies Pieces grade of difficulty of Faure Impromptu C P F Bach Sonata Salzedo Scmittilla Debussy Danses Sacre et Profane

Horn

101, 102 2 cr each Fundamentals of tone productions scales and arpeggios in various articulations chromatic scales ability to read in at least two clefs Mozart Concerto No 3 in E Flat melodic material

201, 202 2 cr each Extend range of all scales and arpeggios diminished seventh chords mixing and preparatory trill studies ability to read in three or four clefs Alphonse Deux Cent Etudes Novelles Book II selected solos orchestral studies

301, 302 2 cr each Selected scales and arpeggios and other drills Alphonse Deux Cent Etudes Nouvelles Book II selected studies from Kopprasch 60 Studies Book I R Strauss Concerto orchestral studies

401, 402 2 cr each Continue scales arpeggios and technical drills Kopprasch 60 Studies Gallay 30 Studies solos by Mozart Godard Corelli representative contemporary solos orchestral studies

Oboe

101, 102 2 cr each Review of previous work by student and corrective exercises as necessary scales and arpeggios Barret Exercises in Articulation and Progressive Melodies selected solos reed making

201, 202 2 cr each Scales and arpeggios in all keys continue Barret selected studies from Bleuzet Technique of the Oboe Vol I solos by Handel and Schumann reed making

301, 302 2 cr each Barret, Progressive Exercises Bleuzet Technique of the Oboe Vol II continue scales and arpeggios in various articulations Handel sonatas orchestral studies contemporary solos reed making

401, 402 2 cr each Barret Etudes selected etudes by Ferling, continue scales and arpeggios solos by Bach and Handel contemporary solos

Organ

101, 102 2 cr each Gleason Method of Organ Playing Stanley Voluntaries Franck I Organist Vierne 24 Pieces before Chorale Preludes Selected works from the early Italian German and French schools Bach Organbuechlein selections 8 short Preludes and Fugues and selected preludes and fugues Organ Class I. Pedal scales in all major keys pedals alone hymn playing introduction to figured bass and harmonization of simple melodies

201, 202 2 cr each Selected works by Brahms Mendelssohn Joseph Wilcox Jenkins Six Pieces Dupre Anthpons Messaen Le Banquet Celeste of Ascension Suite mvts 1 4 Langlass Franck selected works by contemporary composers Bach Organbuechlein Schubler Chorales selected preludes and fugues Organ Class II pedal scales hands and feet in all major and minor keys hymn playing modifications transposition score reading continued harmonizations of melodies

301, 302 2 cr each Selected works by D Aquin Clerambault Sweetick Franck Langlass Messaen Bach Preludes and fugues trio sonatas Organbuechlein Great 18 Choruses Francks by contemporary composers Organ Class III. Continuation of pedal scales hymn playing score reading transposition figured bass counterpoint accompaniments of anthems and canticles

401, 402 2 cr each Selected works by Franck Langlass Tournier Vian and other contemporary composers Bach Preludes and fugues partitas Clavecimbines Part III selections Organ Class IV pedal scales free hymn accompaniments anthem accompaniments and conducting from the console

Percussion

101, 102 2 cr each Rudimentary snare drum technique analyses of existing methods Elementary tympani technique uses of tympani in classical literature tuning

201, 202 2 cr each Intermediate snare drum studies elementary xylophone technique Intermediate tympani studies orchestral literature Beethoven Wagner Performance techniques of most commonly used equipment

301, 302 2 cr each Use of tympani and percussion in late 19th and 20th century literature Orchestra studies in all instruments Examination of percussion ensemble materials group instruction methods Selection and care instruments for professional and school use Extension of mallet study

401, 402 2 cr each Deployment of instruments in band and orchestra settings conducting the percussion ensemble Review of teaching methods in basic techniques the role of the percussion dancer Problems in writing and scoring for percussion discussion of available materials and sources for solo performances

Piano

101, 102 2 cr each Bach two part inventions short preludes and fugues easier sonatas of Haydn and Mozart Beethoven Ronde in C easier no sonatas and major scales M M quarter note equals 96 diminished seventh arpeggios M M quarter note equals 88 All scales and arpeggios in triplet and quadruplet rhythms

201, 202 2 cr each Bach two and three part inventions sonatas of Haydn and Mozart greater sonatas of Beethoven nocturnes and waltzes of Chopin Schumann Op 15 Chorales selected preludes and fugues Organ Class III pedal scales hands and feet in all major and minor keys hymn playing introduction to figured bass and harmonization of simple melodies

301, 302 2 cr each Bach selected preludes and fugues from Well Tempered Clavier Beethoven Op 10 and Op 14 sonatas Chopin Preludes and Nocturnes selections from Impressionistic and Contemporary repertoirre Contemoporary major and minor scales dominant and diminished seventh and major arpeggios

401, 402 2 cr each Bach Concert Etudes Selected preludes and fugues Beethoven Op 2 No 3 Op 28 Op 31 Preludes and Impromptus of Chopin Brahms Intermezzi selections from Contemporary repertoire Contemoporary major and minor scales dominant and diminished seventh and major and minor arpeggios

Saxophone

101, 102 2 cr each All major and minor scales and arpeggios Universal Method for Saxophone or equivalent material Bassi-lasci Concert Etudes selected solos

201, 202 2 cr each Continue scales and arpeggios with various articulations Bassi-lasci Concert Etudes selected solos

301, 302 2 cr each Mule Scales and Arpeggios Gatti-lasci 35 Melodious Technical Exercises pieces by Faure and Jeanbeau

401, 402 2 cr each Mule Scales and Arpeggios Gatti-lasci 35 Melodious Technical Exercises LabanAVIS-33 Concert Etudes Premier Solo de concours by Faure Mule Scales for Saxophone representative contemporary solos

Trombone and Baritone Horn

101, 102 2 cr each Studies and exercises in tone production and flexibility by Shimer Arban Method for Trombone major and minor scales through two octaves selected solos

201, 202 2 cr each All scales and arpeggios continue drills and Arban Method for Trombone selected studies from Omera 170 Etudes Study of single double and triple tonguing Prysor solos and other selected materials band and orchestral studies

301, 302 2 cr each Continue technical exercises Stacey Lip Flexibility Rochut Melodious Etudes Book II Blume Studies Book I La Fosse Sight Reading studies of tenor clef Croce-Spinelli Solo de Concours Alary Contest Pieces Morel Place in F minor

401, 402 2 cr each Continue technical exercises Stacey Lip Flexibility Kopprasch Book I Rochut Melodious Etudes Book III Blazhevich Clef Studies study of bass trombone Guilmant Morece Symphonique Cimera Valse Petite Ropartz Andante and Allegro

Trumpet

101, 102 2 cr each All scales and arpeggios Schlossberg Daily Drills Arban Complete Method for Trumpet selected short pieces

201, 202 2 cr each All major and minor scales and arpeggios Schlossberg Daily Drills Arban Complete Method for Trumpet Kreutzer Ten Studies Concerto by Grofe selected solos band and orchestral studies

301, 302 2 cr each Continue scales and arpeggios in various articulations Schlossberg Daily Drills Concone Fifty Lessons Brandt Etudes for Trumpet Bernstein Rondo for Life Two Pieces for Trumpet by Karz

401, 402 2 cr each Continue Schlossberg and Concone Laurent Etudes Pratiques Book I and II Hering 32 Etudes Clarke solos Moquet Legende Héroque Balay Petite Piece Concertante

Tuba

101, 102 2 cr each All scales and arpeggios Arban Method for Trombone and Baritone selected solo material

201, 202 2 cr each All scales and arpeggios with various articulations continue Arban Bell Foundations of Tuba and Sousaphone Playing selected solos

301, 302 2 cr each Continue scales and arpeggios chromatic scales Bell Foundations of Tuba and Sousaphone Playing Vandercook Etudes Rochut Melodious Etudes Book I Blume Studies Book I Tyrrell Advanced Studies for the BB flat Tuba selected solos band and orchestra studies

401, 402 2 cr each Rochut Melodious Etudes Book II Blume Studies Book III Blazhevich Etudes For The BB flat Bass band and orchestra studies
Violin

101 102 2 cr each
Scales and arpeggios in three octaves from Franchomme and other concertos Bach and Mozart

201 202 2 cr each
Scales and arpeggios continued from Kreutzer and Ode to Viotti

301 302 2 cr each
Scales and arpeggios continued from Franchomme and other short pieces of the Romantic period

401 402 2 cr each
Scales and arpeggios continued from Rode and Gavinius and other short pieces of the Romantic period

Voice

101 102 2 cr each
Technical exercises to fit the needs of the student

201 202 2 cr each
Continuation of technical exercises

EYRHYTHMICS

121, 122 Eurythmics 2 cr each
Fundamentals of rhythmic movement. Study of pulse meter rhythm and duration, the expression-qualities of music such as tempo dynamics and phrasing realized and expressed through bodily movement. Two hours a week

MUSIC EDUCATION

189 190 289 290 389 390 Music Field Observation 0 cr
Music education majors are required to complete six field observations per year. The observations are not credit bearing but are preparation for student teaching. Each student must register for field observation every semester (except senior year) in order to fulfill the pre-requisite for student teaching

181 Woodwind Class I 1 cr
Fundamental principles and techniques of playing and teaching the clarinet. Study of literature which is appropriate for beginning class instruction. For voice, piano and organ majors in the music education program Offered in the fall semester Two hours a week

182 Woodwind Class II 1 cr
Fundamental principles and techniques of playing and teaching the oboe. Study of literature which is appropriate for beginning class instruction. For voice, piano and organ majors in the music education program. Prerequisite: Music 181. Offered in spring semester Two hours a week

183 Woodwind Class II 1 cr
Fundamental principles and techniques of playing and teaching the saxophone. Study of literature which is appropriate for beginning class instruction. For woodwind brass string and percussion majors in the music education program. Music 283 is not a prerequisite for this course. Offered in the fall and spring semesters. Two hours a week

184 Woodwind Class II 1 cr
Fundamental principles and techniques of playing and teaching the trumpet. Study of literature which is appropriate for beginning class instruction. For woodwind brass string and percussion majors in the music education program. Music 283 is not a prerequisite for this course. Offered in the fall and spring semesters. Two hours a week

185 Voice Class 1 cr each
Fundamentals of voice production. Study of the vocal mechanism and vocal tract. Study of vocal science and performance techniques. Two hours a week

186 Voice Class 1 cr each
Fundamentals of vocal production including placement breathing, control, and the production of elementary song material, interval and scale drill. Suitable for students of all voice classifications. Two hours a week

213 214 Piano Class 1 cr each
The development of functional keyboard skills in sight reading, transposition, and performance. Two hours a week. Prerequisites: Piano 111 or 112 or Advanced Standing Examination

215 Piano Class for Piano Majors in Music Education 1 cr
Piano majors in the music education program will study the development of functional keyboard skills in sight reading, transposition, and performance. Required of all Piano Majors. Two hours a week

281 Brass Class I 1 cr
Fundamental principles and techniques of playing and teaching the trumpet. Study of literature which is appropriate for beginning class instruction. For voice, piano and organ majors in the music education program. Offered in the fall semester. Two hours a week

282 Brass Class II 1 cr
Fundamental principles and techniques of playing and teaching the trumpet. Study of literature which is appropriate for beginning class instruction. For voice, piano and organ majors in the music education program. Offered in the fall and spring semesters. Two hours a week

283 Brass Class II 1 cr
Fundamental principles and techniques of playing and teaching the French horn, trumpet, and tuba. Study of construction, fingering, and evaluation of class methods and materials. For woodwind brass, string and percussion majors in the music education program. Offered in the fall and spring semesters. Two hours a week

301 String Class I 1 cr
Each student selects one of the string instruments to study throughout the semester in order to attain greater technical proficiency. Two hours a week

383 String Class II 1 cr
Fundamental principles and techniques of playing and teaching the violin. Study of literature which is appropriate for beginning class instruction. For voice, piano and organ majors in the music education program. Music 183 is not a prerequisite for this course. Offered in the fall and spring semesters. Two hours a week

384 Conductor Classes 2 cr
Principles of conducting and practice of conducting with an emphasis on conducting the clarinet, French horn, trombone, and tuba. Study of literature which is appropriate for beginning class instruction. For voice, piano and organ majors in the music education program. Music 183 is not a prerequisite for this course. Offered in the fall and spring semesters. Two hours a week
385 Choral Methods 1 cr
This course deals with all aspects of choral singing and their application to music programs. Emphasis is placed on the development of performance ensembles. Technical rehearsals special choral problems planning musical productions and practical work in choral conducting and arranging. Includes principles, practices, materials, and an overview of current teaching strategies and curriculum trends as applied to the total music program of the secondary school. Offered Spring Semester only

387 Marching Band Techniques 1 cr
Principles, practices, and materials for the marching band including its role in the total music program organization and maintenance planning and executing of the field show. Basic maneuvers and rehearsal procedures.

481 Percussion Class Techniques 1 cr
Fundamental principles and techniques of playing and teaching the percussion instruments of the band and orchestra with special emphasis on the keyboard instruments. Two hours a week

490 Student Teaching 6 cr
Practical teaching in approved elementary and secondary schools under the guidance of a critic teacher and the college supervisor. Note: Before a student will be permitted to begin Student Teaching all field observations and methods classes including instrumental classes, piano, woodwinds, brass, strings, and voice must be satisfactorily completed. Percussion elementary and secondary methods must be taken in the same semester as student teaching. Students will receive complete instructions together with lists of materials when they enroll in the Music Education program. Practical techniques to aid students in fulfilling the requirements will be explored in various methods classes.

MUSIC HISTORY, LITERATURE AND ART

251 252 351 352 History and Literature of Music 2 cr each
An historical survey of the ideas and cultural achievements of Western man in the context of the political and social developments to which the art of music is bound. The survey embarks four semesters which are arranged chronologically. These courses seek to provide a broad historical frame of reference within which the relationship of music to the development of man's thought can be clearly seen along with a survey and analysis of representative literature.

452 Organ Literature 2 cr each
A survey of organ literature and organ building as it relates to organ registration. The first semester treats organ music from the Renaissance through J. S. Bach. The second semester deals with the literature from 1750 to the present. Outside listening and readings will be required.

152 Evolution of Jazz Styles II 2 cr
A study and analysis of recorded improvised solos by major jazz artists from 1940 to the present.

455 Music and Mass Media 1 cr
The use of music in television and films. Industrial shows, stage shows, etc. and the composer-performer rights under U.S. copyright law as well as agreements and relations between producers directors, performers, producers and booking agents involved.

MUSIC THEORY

The Theory Department recognizes the individual differences of students and provides an opportunity for them to advance according to their abilities.

131 132 Theory 2 cr each
This course is designed to acquaint the student with the materials of musical composition using diatonic harmony. Opportunities for the student to do creative work are provided. Three hours a week

133 134 Musicianship 2 cr each
The goals of the course are to develop good intonation and the ability to sight sing the ability to identify and notate melodies, rhythm chords, and complete compositions and to develop an inner hearing and memory. The devices used are solfeggio (singing instrumental and vocal parts), preparing and on sight) drills on intervals and broken chords, unison and two-part rhythm exercises, keyboard work, and drill reading and systematically graded dictation. The course uses the moveable Do system based on the Kodaly method. Two hours a week

231 232 Theory I 2 cr each
A continuation of 132 introducing chromatic harmony and the basic principles of contrapuntal writing. Creative opportunities continued. Three hours a week

233 234 Musicianship I 2 cr each
A continuation of 134. Two hours a week

335 Countertone 2 cr
The course is devoted to a study of the polyphonic technique of the sixteenth century

336 Countertone 2 cr
A course study concerned with the harmonic contrapuntal technique of the period of J. S. Bach

340 Orchestration 2 cr
A study of the basic problems of scoring for individual instruments particularly orchestral choral, the entire orchestra and unique instrumental combinations. Analysis of the techniques of orchestration of selected composers of the 18th, 19th and 20th centuries

430 Jazz Arranging 2 cr
A study of the basic techniques of scoring for individual instruments and ensembles of various sizes from small groups to studio orchestras. Analysis of scores by contemporary big band arrangers.

440 Advanced Jazz Arranging 2 cr
Advanced arranging techniques for the jazz and studio ensembles.

138 139 Composition 2 cr each
The study of writing of musical composition in the smaller forms.

238 239 Composition 2 cr each
These courses are offered in order to provide gifted young composers an opportunity to receive guidance in the development of advanced compositional techniques. Permission of the chairman of the Theory Department is required.

226 Jazz Improvisation I 2 cr
Beginning study and practice of melodic improvisation, conventional forms and chord progressions employing idiomatic jazz and articulations major and minor scales.

227 Jazz Improvisation II 2 cr
A continuation of 226 with an introduction to altered scales and modes.

426 Jazz Improvisation III 2 cr
A continuation of 227 with an emphasis on chromatically altered scales and extended forms.

427 Jazz Improvisation IV 2 cr
Extension and continuation of 426 with an emphasis on the practical application of advanced techniques to the study of jazz literature.

453 Jazz Composition I 2 cr
A study of advanced compositional techniques as applied to contemporary jazz styles. Analysis of jazz compositions from 1940 to the present.

454 Jazz Composition II 2 cr
A continuation of 453 with emphasis on individual style development.

MUSIC THERAPY

107 Music Therapy Orientation 3 cr
An introduction to Music Therapy as practiced in a variety of rehabilitation settings. Observations followed by informal group discussions. Basic theory about the validity of music as therapy, the relationship of theory to practice. Intensive class participation will be required to prove qualification for further in-depth study of the profession.

108 Music in Therapy 3 cr
An exposure to music therapy techniques utilized in working with handicapped children and adults. Application of course study. Prerequisites: Music Therapy Orientation I and III.

307 Psychology of Music 2 cr
An exploration of musical behaviors and a lesser degree all other art behaviors of a variety of cultures and sub-cultures, beginning with the student's personal experience. Extensive class participation will be expected. Prerequisite: Introduction to Psychology.

308 Influence of Music on Behavior 2 cr
Reviews different treatment theories and their relationship to music therapy. Emphasizes the effects of music on behavior and total health. Develops a philosophy of music therapy with a background in holistic health.

309 Directed Study in Music Therapy 2 cr
Stresses a typical and functional use of music and covers other musical instruments and devices for recreational purposes. No specific text used. Each student required to have a guitar and harmonica.

315 Piano Improvisation for Music Therapy 1 cr
Development of functional keyboard skills in improvisation on rhythm and dissonant chords as an aid in non-verbal communication with the handicapped client.

124 Music Therapy Practicum I 1 cr each
Each practicum is a field placement in a clinical setting for a minimum of one hour per week for 12-15 weeks per semester. Students are placed with music therapists who practice in a variety of clinical settings or with clients who can provide a structured therapeutic program. Attendance at four monthly seminars per semester is required.

SACRED MUSIC

309 Children's Choruses 1 cr
Materials and techniques used in dealing with children's choirs.

431 432 Improvisation 2 cr each
A practical application of the basic tools of improvisation, including harmonization of melodies at the organ, voice, and sub-cultures of Gregorian Chant. No specific text used. Each student required to have a guitar and harmonica.

478 479 Choral Conducting and Methods 1 cr each
Development of conducting techniques. The study of rehearsal and class performance of choral works in various styles.

464 Church Music Administration 2 cr
Seminar in practical aspects of church music, establishing the music program in a church. Directed literature of the church's choral instruments and workshop contracts for systems worship commissions etc.

421 Gregorian Chant 2 cr
The history, notation and modal system of Gregorian chant. Class participation in the singing of chant. Chant as prayer and current liturgical application.

420 Hymnody 2 cr
A study of the church's heritage of song. The psalms, the great hymns of the medieval church, the heritage of music in the reformation, the liturgical psalms and Gregorian chants.
Harp
101. 102 2 cr each
Lauriere Exercises and technical studies Standard orchestra parts Bocchi Etudes opus 318 Book II Pieces grade of difficulty of Grandy in Classic style Tourner Images I Suite I Saint-Saens Fantasie

201 202 2 cr each
Technical studies Bocchi Etudes opus 62 Standard orchestra cadenzas Pieces grade of difficulty of Tourner Ferre Rousseau Variations Pastorales Grandy Fantasie on a Theme of Haydn

301. 302 2 cr each
Technical studies Orchestra parts Bocchi Etudes Opus 34 Pieces grade of difficulty of Hindemith Sonata Handel Concerto in Bb major Ravel introduction and Allegro

401 402 2 cr each
Technical studies Pieces grade of difficulty of Grandy in Band Impromptu C P E Bach Sonata Salzedo Scintillation Debussy Dances Sacre et Profane

Horn
101. 102 2 cr each
Fundamentals of tone productions scales and arpeggios in various articulations chromatic scales ability to read in at least two clefs Mozart Concerto No 3 selected melodic material

201 202 2 cr each
Extend range of all scales and arpeggios diminished seventh chords muting and preparatory trill studies ability to read in three or four clefs Alphonse Deux Cent Etudes Nouvelles Book II selected solos orchestral studies

301. 302 2 cr each
Continue scales arpeggios and other drills Alphonse Deux Cent Etudes Nouvelles Book III selected studies from Koppach 60 Studies Book I R Strauss Concert studies

401 402 2 cr each
Continue scales arpeggios and technical drills Koppach 60 Studies Gally 30 Studies solos by Mozart Godard Corelli representative contemporary solos orchestral studies

Oboe
101. 102 2 cr each
Review of previous work by student and corrective exercises as necessary scales and arpeggios Barret Exercises in Articulation and Progressive Melodies selected solos reed making

201 202 2 cr each
Scales and arpeggios in all keys continue Barret selected studies from Bleuzet Technique of the Oboe Selected solos by Handel and Schumann reed making

301 302 2 cr each
Barret Progressive Exercises Bleuzet Technique of the Oboe Vol II continue scales and arpeggios in various articulations Handel sonatas orchestral studies contemporary solos reed making

401 402 2 cr each
Barret Etudes selected etudes by Ferling continue scales and arpeggios solos by Bach and Handel contemporary solos

Organ
101. 102 2 cr each
Gleason's Method of Organ Playing Stanley Voluntary Franck I Organist Viernie 24 Pieces Dupet Chorale Preludes Selected works from the early Italian German and French schools Bach Organbuechlein selections 8 short Preludes and Fugues and selected Preludes and fugues Organ Class I pedal scales in all major and minor keys hymn playing introduction to figured bass and harmonization of simple melodies

201 202 2 cr each
Selected works by Brahms Mendelssohn Joseph Vex Kos Jenkins Six Pieces Dupet Antphons Messiaen Le Banquet Celeste of Ascension Suite mvts I 4 Langlass Franck selected works by contemporary composers Bach Organbuechlein Schubler Organbuechlein Selected Preludes and figures Organ Class II pedal scales hands and feet in all major and minor keys hymn playing modulations transposition score reading continued harmonizations of melodies

301. 302 2 cr each
Selected works by D Aquin Clerambault Sweelinck Franck Langlass Messiaen Bach Preludes and fugues sonatas Organbuechlein Great 18 chorales works by contemporary composers Organ Class III Continuation of pedal scales hymn playing score reading transcription figured bass counter accompaniments of anthems and canticles

401 402 2 cr each
Selected works by Franck Langlass Tournemire Vienné Alain and other contemporary composers Bach Preludes and fugues partitas Clavierubung Part III selections Organ Class IV pedal scales free hymn accompaniments anthem accompaniments and conducting from the console

Percussion
101. 102 2 cr each
Rudimentary snare drum technique analysis of existing methods Elementary tympani technique use of tympani in classical literature tuning

201. 202 2 cr each
Intermediate snare drum studies elementary xylophone technique Intermediate tympani studies orchestral literature Beethoven to Wagner Performance techniques of most commonly used equipment

301. 302 2 cr each
Use of tympani and percussion in late 19th and 20th century literature orchestral studies in all instruments Examination of percussion ensemble materials group instruction methods Selection and care of mallets for professional and school use Extension of mallet study

401 402 2 cr each
Deployment of instruments in band and orchestra settings conducting the percussion ensemble Review of teaching methods in basic techniques the role of the percussion clinician Problems in writing and scoring for percussion discussion of available materials and resources for solo performances

Plano
101. 102 2 cr each
Bach two part inventions short Preludes and fugues easier sonatas of Haydn and Mozart Beethoven Rondo in C easier nocturnes and mazurkas of Chopin Major scales M M quarter note equals 96 diminished seventh arpeggios M M quarter note equals 88 All scales and arpeggios in triplet and quadruplet rhythms

201 202 2 cr each
Bach two and three part inventions sonatas of Haydn and Mozart easier sonatas of Beethoven nocturnes and waltzes of Chopin Schumann Op 15 Scales Major and Minor M M quarter note equals 104 Dominant and diminished seventh arpeggios M M quarter note equals 96

301. 302 2 cr each
Bach selected Preludes and fugues from WellTempered Clavier Beethoven Op 10 and Op 14 sonatas Chopin Preludes and Nocturnes selections from Impressionistic and Contemporary repertoire Continuation of major and minor scales dominant and diminished seventh and major arpeggios

401. 402 2 cr each
Bach French Suites selected Preludes and fugues Beethoven Op 2 No 2 and Op 30 Op 31 Preludes and Impromptus of Chopin Brahms Impromptus selections from Contemporary repertoire Continue scales dominant and diminished seventh and major and minor arpeggios

401. 402 2 cr each
Continue Schlossberg and Concorne Lauret Etudes Pratiques Book I and II Messiaen 32 Etudes Clarke solos Mouquet Legende Hesiquie Balay Petite piece Concertante

Trumpet
101. 102 2 cr each
All scales and arpeggios Schlossberg Daily Drills Arban Complete Method for Trumpet selected short pieces

201 202 2 cr each
All major and minor scales and arpeggios Schlossberg Daily Drills Arban Complete Method for Trumpet Kreutzer Ten Studies for Trumpet by Grobe selected solos band and orchestral studies

301 302 2 cr each
Continue scales and arpeggios in various articulations Schlossberg Daily Drills Concone Fifty Lessons Brandt Studies for Trumpet Bernstein Rondo for Life Two Pieces for Trumpet by Karzey

401 402 2 cr each
Continue Schlossberg and Concorne Lauret Etudes Pratiques Book I and II Henning 32 Etudes Clarke solos Mouquet Legende Hesiquie Balay Petite Piece Concertante

Tuba
101. 102 2 cr each
All scales and arpeggios Arban Method for Trombone and Baritone selected solo material

201. 202 2 cr each
All scales and arpeggios with various articulations continue Arban Bell Foundations of Tuba and Sousaphone Playing selected solos

301. 302 2 cr each
Continue scales and arpeggios chromatic scales Bell Foundations of Tuba and Sousaphone Playing selected solos

401. 402 2 cr each
Continue scales and arpeggios chromatic scales Bell Foundations of Tuba and Sousaphone Playing selected solos
Violin

101, 102 2 cr each
Scales and arpeggios in three octaves in thirds, sexts, octaves (Fleisch) Dont Schradieck Mazas or Kreutzer Baroque period concertos and sonatas concertos Bach and Mozart

201, 202 2 cr each
Scales and arpeggios continued Fiorelli or Kreutzer concertos of Bach DeBeriot Mozart Rode and Vivaldi

301, 302 2 cr each
Scales and arpeggios continued Kreutzer or Rode short pieces of the Romantic period standard concertos sonatas

401, 402 2 cr each
Scales and arpeggios continued Rode or Gaviniis short pieces of the Romantic period Bach Solo Partitas standard concertos and sonatas

Voice

101, 102 2 cr each
Technical exercises to fit the needs of the student Literature from all periods to fit the vocal needs of the student

201, 202 2 cr
Continuation of technical exercises More challenging repertoire from all periods

301, 302 2 cr
Continuation of technical exercises Opera and oratorio repertoire included when vocally suitable in addition to concert repertoire

401, 402 2 cr
Continuation of technical exercises More advanced opera oratorio and concert repertoire and contemporary theater literature

Conducting

379 380 Conducting I II 1 cr each
This course provides a study of the fundamentals of conducting as a performing skill teaching technique and as an interpretive art. Use of the baton choral and instrumental rehearsal techniques and score reading.

2 hours a week

327 Jazz Pedagogy & Directing 1 cr
Methods and materials pertinent to rehearsal and conducting. Jazz ensembles studio orchestras and theater orchestras with emphasis on conducting as a performing skill as well as an interpretive art.

Ensemble

Required for all students as laboratory work during each semester of full-time enrollment. Nonmusic majors are invited to register for ensemble with permission of instructor.

143 Ensemble 0-1 cr each
Voice Piano and Organ Majors will participate in a choral ensemble for each semester of enrollment. Instrumental Majors will participate in Band or Orchestra for each semester of enrollment.

Instrumentalists are encouraged to take advantage of opportunities to participate in choir. Keyboard or voice majors are likewise encouraged to gain experience in one of the instrumental ensembles

147 148 Small Ensemble 0-1 cr each
The Small or Minor Ensembles include Brass Ensemble Guitar Ensemble Jazz Ensemble Percussion Ensemble String Ensemble Tamburitza Ensemble and Woodwind Ensemble

116 Opera Workshop 0-1 cr each
A performing class in which students learn standard and other opera repertoire in English and the original languages. There is one major production each semester plus several outside performances

141 Chamber Music 1-2 cr each
Study and performance of all types of chamber music for the various instrumental combinations

Eurhythmics

121, 122 Eurhythmics 2 cr each
Fundamentals of rhythmic movement. Study of pulse, rhythm and coordination the expressive qualities of music including tempo dynamics and phrasing realized and expressed through bodily movement.

Two hours a week.

Music Education

189, 190, 289, 290, 389, 390 Music Field Observation 0 cr
Music education majors are required to complete six field observations per year. The observations are not credit bearing but are preparation for student teaching. Each student must register for field observation every semester except senior year in order to fulfill the pre-requisite for student teaching.

181 Woodwind Class I 1 cr
Fundamental principles and techniques of playing and teaching the clarinet. Study of literature which is appropriate for student teaching.

182 Woodwind Class II 1 cr
Performance technique on clarinet continued. Teaching technique of oboe bassoon and saxophone covered.

183 Woodwind Class III 1 cr
Fundamental principles and techniques of playing and teaching the saxophone. Study of literature which is appropriate for beginning class instruction. Performance technique on oboe bassoon and saxophone.

184 Woodwind Class IV 1 cr
Fundamental principles and techniques of playing and teaching the saxophone. Study of literature which is appropriate for continuing class instruction. Performance technique on oboe bassoon and saxophone.

185, 186 Voice Class 1 cr each
Fundamentals of voice production including placement breathing breath control study of vowels and consonant posture elementary song materials. Performance begun.

187, 188 Piano Class 1 cr each
Principles of keyboard skills in sight reading transposition harmonization of melodies and improvisation. More sophisticated repertoire. Required of all Music Education students with the exception of piano majors.

Two hours a week Prerequisites Piano 111, 112 or Advanced Standing Examination

215 Piano Class for Piano Majors in Music Education 1 cr
Piano majors in Music Education study the development of functional keyboard skills in sight reading transposition accompaniments. Required of all Piano Majors.

Two hours a week

281 Brass Class I 1 cr
Fundamental principles and techniques of playing and teaching the trumpet. Study of literature which is appropriate for beginning class instruction. For voice piano and organ majors in the music education program. Offered in the fall semester. Two hours a week

282 Brass Class II 1 cr
Performance technique on trumpet continued. Teaching technique of French horn trombone baritone and tuba. For voice piano and organ majors in the music education program. Prerequisite Music 281. Offered in the spring semester.

Two hours a week

283 Brass Class III 1 cr
Fundamental principles and techniques of playing and teaching the trombone. Study of literature which is appropriate for beginning class instruction. For voice piano and organ majors in the music education program. Prerequisite Music 281. Offered in the fall semester.

Two hours a week

284 Brass Class IV 1 cr
Fundamental principles and techniques of playing and teaching the French horn, trombone, baritone, and tuba. Study of construction fingering and evaluation of class methods and materials. For woodwind brass string and percussion majors in the music education program. Music 283 is not a prerequisite for this course. Offered in the fall and spring semesters. Two hours a week

311 String Class I 1 cr
Each student selects one of the string instruments and studies it throughout the semester in order to attain greater technical proficiency. Two hours a week

312 String Class II 1 cr
Principles practices and materials for the general program in the elementary grades. A program of student presentations and discussion periods will be required. Two hours a week. Prerequisite 211 or 215 Piano Class

313 Secondary Methods 2 cr

Two hours a week
385 Choral Methods 1 cr
This course deals with all aspects of choral singing and their application in all musical programs. Emphasis is placed on the development of performance ensembles, rehearsal techniques, special choral problems, planning musical productions, and practical work in choral conducting and arranging. Includes principles, practices, materials, and an overview of current teaching strategies and curriculum trends as applied to the total music program of the secondary school. S 1 cr. Fall, Spring, and Summer. 10 stu. S 1 hr. Tu.

387 Marching Band Techniques 1 cr
Principles, practices, and materials for the marching band including study of techniques of the band program; organization and maintenance planning and executing of the field show; basic maneuvers and rehearsal procedures. S 1 hr. Tu.

481 Percussion Class Techniques 1 cr
Fundamental principles and techniques of playing and teaching the percussion instruments of the band and orchestra with special emphasis on the keyboard instruments. Two hours a week.

490 Student Teaching 6 cr
Practice teaching in approved elementary schools under the guidance of a critical teacher and the college supervisor. Note: Before a student will be permitted to begin Student Teaching, all field observations and methods classes including instrumental classes piano, woodwinds, brass strings, and voice must be completed. Percussion elementary and secondary methods must be taken in the same quarter as student teaching. Students will receive complete instructions together with written materials when they enroll in the Music Education program. Practical techniques of aid in non-verbal communication with the handicapped child.

MUSIC HISTORY, LITERATURE AND ART
251 252 351 352 History and Literature of Music 2 cr each
An historical survey of the ideas and cultural achievements of Western man in the context of the political and sociological developments to which the art of music is bound. The survey embraces four centuries which are arranged chronologically. These courses seek to provide a broad historical frame of reference within which the relationship of music to the development of man’s thought can be clearly seen along with a survey and analysis of representative literature.

451 452 Organ Literature 2 cr each
A survey of organ literature and organ building as it relates to organ registration. The first semester treats organ music from the Renaissance through the 17th century. The second semester deals with the literature from 1750 to the present. Outside listening and readings will be required.

151 Evolution of Jazz Styles I 2 cr
A study of the origin, development and styles of jazz music and its ramifications with an emphasis on recorded music as well as scores of compositions.

152 Evolution of Jazz Styles II 2 cr
A study and analysis of recorded improvised solos by major jazz artists from 1940 to the present.

455 Music and Mass Media 1 cr
The use of music in television and films: Industrial stage shows, etc., and the composer-performer's role under U.S. Copyright law, as well as agreements and relations between producers and directors. Performers, writers, and booking agents involved.

MUSIC THEORY
The Theory Department recognizes the individual differences of students and provides an opportunity for them to advance according to their abilities.

131, 132 Theory 2 cr each
The goals of the course are to develop good intonation and the ability to sight-sing. The ability to identify and notate melodies, rhythm, and complete compositions and to develop inner hearing and memory. The devices used are solfeggio, insinging unison and ensemble music prepared and on sight-drills on intervals and broken chords unison and two-part rhythms such as keyboard work and clef reading and systematically graded dictation. The course uses the Moveable Do system based on the Kodaly method. Two hours a week.

133, 134 Musicianship 2 cr each
A continuation of 132 introducing chromatic harmony and the basic principles of contrapuntal writing. Creative opportunities continued. Three hours a week.

231, 232 Theory 2 cr each
A continuation of 132 introducing chromatic harmony and the basic principles of contrapuntal writing. Creative opportunities continued. Three hours a week.

233, 234 Musicianship 2 cr each
A continuation of 134. Two hours a week.

335 Counterpoint 2 cr
The course is devoted to a study of the polyphonic technique of the sixteenth century.

336 Counterpoint 2 cr
A course study concerned with the harmonic contrapuntal technique of the period of J. S. Bach.

340 Orchestration 2 cr
A study of the basic problems of scoring for individual instruments, particularly the violin, making the orchestral orchestra and unique instrumental combinations. Analysis of the techniques of orchestration of selected composers of the 18th 19th and 20th centuries.

430 Jazz Arranging 2 cr
A study of the basic techniques of scoring for individual instruments and jazz ensembles of various sizes from small groups to studio orchestras. Analysis of scores by contemporary big band arrangers.

440 Advanced Jazz Arranging 2 cr
Advanced arranging techniques for the jazz and studio ensembles.

139 Composition 2 cr each
The study of writing of musical composition in the smaller forms.

239 Composition 2 cr each
These courses are offered in order to provide gifted young composers an opportunity to receive guidance in the development of advanced compositional techniques. Permission of the chairman of the Theory Department is required.

266 Jazz Improvisation I 2 cr
Beginning study and practice of melodic improvisation: conventional forms and chord progressions, employing idiomatic jazz and articulations major-minor and modal scales.

267 Jazz Improvisation II 2 cr
A continuation of 266 with an introduction to altered scales and chords.

426 Jazz Improvisation III 2 cr
A continuation of 267 with an emphasis on chromatically altered scales and extended forms.

427 Jazz Improvisation IV 2 cr
Extension and continuation of 426 with an emphasis on the practical application of advanced techniques to the study of jazz literature.

453 Jazz Composition I 2 cr
A study of advanced compositional techniques as applied to the contemporary jazz styles. Analysis of jazz compositions from 1940 to the present.

454 Jazz Composition II 2 cr
A continuation of 453 with emphasis on individual style development.

MUSIC THERAPY
107 Music Therapy Orientation 3 cr
An introduction to Music Therapy as practiced in a variety of rehabilitation settings. Observations followed by informal group discussions. Basic theory of music as therapy. The relationship of therapy to practice. Intensive class participation will be required to prove qualification for further in-depth study of the profession.

108 Music in Therapy 3 cr
An introduction to music therapy techniques used in working with physically handicapped children and adults. Applications to current practice will be emphasized. Prerequisite: Music Therapy Orientation.

109 Psychology of Music 2 cr
An in-depth study of music as a source of inspiration and the emotional involvement of music. An examination of the human's relationship to music and its effect on behavior and total health. Develops a philosophy of music therapy with a background in holistic health.

308 Directed Study in Music Therapy 2 cr
A study of areas of music therapy psychology of music brain research and other expressive therapies are reviewed and discussed.

310 Recreational Instruments 1 cr
Stresses a typical and functional uses of guitar and other musical instruments and devices for recreational purposes. No specific text used. Each student required to have a guitar and harmonica.

315 Piano Improvisation for Music Therapy 1 cr
Development of functional keyboard skills in improvisation on rhythm and dissonant chords as an aid in non-verbal communication with the handicapped client.

124 Music Therapy Practicum 1 cr each
Each practicum is a field placement in a clinical setting for one hour per week for 12-15 weeks per semester. Students are placed with music therapists who practice in a variety of clinical settings or with those who can provide a structured therapeutic program. Attendance at four monthly seminars per semester is required.

SACRED MUSIC
209 Children's Choruses 1 cr
Materials and techniques used in dealing with children's choruses.

431 432 Improvisation 2 cr each
A practical application of the basic tools of improvisation including harmonization of melodies at the organ and voice. Taught as a quartet, short ABA forms and chorale preludes with emphasis on their liturgical application.

478 479 Choral Conducting and Methods 4 cr each
Development of conducting technique. The study of rehearsal and class performance of choral works in various styles.

464 Music Administration 2 cr
Seminar in practical aspects of church music. Establishing the music program in a church graded choir systems children's choirs; instrumental performance, and choral presentations in workshop contracts chant systems; worship programs, etc.

421 Gregorian Chant 2 cr
The study of organ registration and modal system of Gregorian chant. Class participation in the singing of chant as prayer and current liturgical application.

420 Hymnody 2 cr
A study of the church's heritage of song. The psalms, the great hymns of the Medieval Church, the heritage...
of Luther, Calvin, and their followers. English hymnody, American contributions to twentieth-century hymnody with special emphasis on the theological framework for each major development in the history of hymnody.

476 Organ Design and Maintenance 2 cr
A study of the basic concepts of organ construction with emphasis on the historical development of the organ and the mechanical operation of the pipes and console. Tuning, voicing, and esthetics of organ design will be discussed.

322 Sacred Choral and Solo Literature 2 cr
A survey of choral and vocal literature for the church with emphasis on practical materials for church choirs, solos, and congregations.

407 408 Service Playing 1 cr each
An introduction to service playing for students majoring in organ. Hymn playing, score reading, anthem, and canticle accompaniments and conducting from the console will be emphasized.

TAMBURITZANS INSTITUTE OF FOLK ARTS

161 162 Introduction to Folk Dance 2 cr each
The course introduces folk dance as a genre of movement examining the types and styles of folk dance found among different nations and cultures of the world. In addition to the dance accomplishment in different nations and cultures and it will touch upon the related areas of folk instruments, folk singing styles, language customs, and folk costuming.

255 Introduction to Balkan Music 2 cr
An analytical study of the primitive and traditional folk music of the Balkans. Its musical styles, forms and characteristics in terms of its geographical setting and historical background, and its general structure and aesthetics.

256 Introduction to Balkan Dance 2 cr
A survey of folk dances of the Balkans highlighting their development forms, indigenous characteristics, differences, and similarities from one ethnographic region to another.

147 Tamburitza Ensemble 1 cr each
The Tamburitza Ensemble involves the study and performances of music specifically composed and arranged for both small and large Tamburitza string ensembles. It encompasses the fundamental principles and techniques for both playing and teaching the Tamburitza and includes appropriate literature.

NON—MUSIC MAJORS

321 Music for the Classroom Teacher 2 cr
The aim of this course is to assist the student in gaining an appreciation of the importance of music in the lives of children. A knowledge of fundamental principles of instruction in music and a familiarity with the variety of musically enriching experience.

GENERAL EDUCATION

492 Development of the Creative Personality 3 cr
This course encourages creative growth through the development of the individual and group projects in music, music education, and music therapy. Limited enrollment with the consent of the instructor. Prerequisites: Introduction to Psychology and Educational Psychology.

Descriptions of courses in English, modern languages, psychology, sociology, and education required in the several curricula will be found in the College of Liberal Arts and Sciences catalog.

School of Nursing

HISTORY

Since it is the policy of the University to establish its schools under control of an already established school, the School of Nursing was originally organized in 1933 as a unit in the College of Liberal Arts and Sciences. On March 15, 1937, the Department of Nursing Education was approved by the Board of Education. On December 3, 1937, the State Board of Education of the Commonwealth of Pennsylvania approved the school and authorized Duquesne University to confer the degree of Bachelor of Science in Nursing and the degree of Bachelor of Science in Nursing Education upon graduates according to the appropriate curriculum. Previously the School of Nursing offered two programs both leading to the degree of bachelor of science in nursing. However, since 1964 both general nursing students and registere nurse students enroll in the same program.

SCHOOL OF NURSING PHILOSOPHY AND DEFINITION OF NURSING

The philosophy of the School of Nursing evolves from that of Duquesne University. As such, it guides the development of a personal philosophy of life based on a Judeo-Christian frame of reference and supports a commitment to the values which give meaning to life and the nurse's role.

The nurse has the freedom to choose changing dimensions of health and health values which emerge from ethics, traditions, and personal beliefs. The educational process is a co-constituted one in which the nurse-client-family participate.

The School of Nursing at Duquesne University is based on an appreciation and understanding of the philosophy and the beliefs about man and health. These beliefs are reflected in nursing practice through an approach that embraces man in his wholeness as one who continually moves forward in changing complexity through individual patterns of expression. The nursing practice of this graduate is also based on the recognition that the responsibility for the health situation is a shared process in which the nurse client and family participate.

The educational process is a co-constituted one in which the teacher and learner plan experiences and share knowledge. The emergence of new knowledge is encouraged through the ongoing interrogation of present knowledge and new experience. This enhances the nurse's preparation for future and evolving responsibilities within professional nursing based on changes and characteristics of the population for whom health care will be delivered.
PROGRAM PURPOSES, GOAL AND INDICATORS

The purposes of the program are
1. To prepare the graduate for beginning levels of professional nursing in a variety of settings
2. To provide the foundation for graduate education in nursing

The program is designed to practice nursing as a human science in a variety of settings.

Within the philosophy and purposes of the School of Nursing, the faculty has formulated a curriculum that provides learning experiences to assist students to acquire specific knowledge and skills. The indicators of this program state that upon completion of the program the graduate
1. Promotes the rights and dignity of man in health care
2. Instructs health care from the perspective of client's and family's belief about health
3. Engages client and family in a health care decision-making process relative to the man-client-s and family's belief about health
4. Evaluates nursing as a human science in providing health care to clients and families and groups
5. Promotes professional standards of responsibility and accountability in nursing practice
6. Uses current research findings in providing a basis for change in nursing practice
7. Participates in studies/projects which enhance nursing practice
8. Enhances own effectiveness in nursing based on continuous self-evaluation
9. Synthesizes knowledge from related sciences and the humanities in the utilization of the nursing process
10. Evaluates the values and goals of the nursing profession in light of the continued development of nursing

DEGREE
The School of Nursing undergraduate program leads to the degree of Bachelor of Science in Nursing

PROGRAM OF STUDY
The School of Nursing offers a program with a major in nursing leading to a bachelor's degree to qualified high school graduates registered nurses non-nursing baccalaureate graduates and qualified transfer students. The program includes four years of study and is designed to provide the student with the knowledge and the skills needed to practice as a professional nurse generalist upon graduation. The general and professional education acquired in this program provides a basis for the graduate to progress to positions of increasing responsibility and to undertake graduate study.

The curriculum design has three components: complementary courses, supplementary courses, and core nursing courses. The offerings in the natural biological and human sciences support the philosophy that provides the basis for the conceptual framework of the professional nursing program.

Professional nursing courses which constitute the nursing major include theory and practice in the nursing care of individuals and families. Learning opportunities are provided in hospitals in homes and in the community.

The faculty of the School of Nursing conducts all professional nursing courses and also guides and directs the practicum learning experiences. A variety of hospitals and agencies cooperate with the School of Nursing to provide a wide selection of excellent practice settings.

Upon the successful completion of this program graduates will be eligible to write the examination for licensure in the state in which they wish to practice.

The faculty reserves the right to make changes in the curriculum and program requirements which are believed to be in keeping with the changing health needs of society and the best interest of the students and the School to maintain quality professional nursing education.

ADMISSION REQUIREMENTS

ADMISSION OF HIGH SCHOOL GRADUATES

The specific entrance requirements for admission are:

1. The applicant's high school curriculum must include a minimum of 16 units distributed as follows:
   - English
   - Social Studies
   - Language
   - Math and Science

2. A candidate must have been graduated from an approved secondary school in the upper two-thirds of the class and have demonstrated exemplary personal conduct in the institution.

3. The primary consideration for admission is the secondary school academic record. This is considered to be the most important criterion of success at Duquesne University. It is the desire of the Admissions Committee to admit those candidates who possess qualities of character and intellect and who show promise of development into useful and contributing citizens.

4. A candidate must present satisfactory scores of the required College Entrance Examination Board Scholastic Aptitude Test in accordance with the standards to which the University adheres.

In specific instances and at the discretion of the Committee on Admissions, the genuine equivalent of these requirements may be accepted in lieu of the foregoing precise requirements. See the section on Admissions for other University requirements.

REGISTERED NURSE STUDENTS

Duquesne University School of Nursing is currently developing an evening program to be offered to registered nurses. This program is designed to meet the needs of the registered nurse student who is a graduate of a hospital diploma program or an associate degree in nursing program. The nursing major portion of the program is being scheduled during the evening hours for the convenience of the working student.

All students in the B.S.N. Evening Program must complete the University's liberal arts requirement prior to progressing to the nursing major. Any previously earned college credits will be evaluated for application toward the degree requirements.

Admission Requirements

- High school diploma or equivalent
- Graduation from an accredited associate degree program
- Current licensure as a registered nurse in Pennsylvania
- Present or past experience in nursing
- Verification of active malpractice insurance
- Fulfillment of prescribed science and math requirements of the School of Nursing
- Personal interview
- An annual physical examination and certain immunization and health tests are required of all nursing students attending Duquesne University

Further information can be obtained from the Academic Advisor in the School of Nursing.

TRANSFER STUDENT ADMISSION

See Admissions Section for further requirements

Admission criteria for transfer students:

1. A cumulative GPA of 2.5 from the transferring student's institution
2. A cumulative GPA of 2.5 from either a secondary school or post-secondary institution
3. Personal interview with the Academic Advisor in the School of Nursing

Provisions affecting placement:

1. No transfer student can be accepted into nursing practice courses during the first semester of attendance at Duquesne University.
2. Only courses taken within the past ten years will be evaluated for transfer credit. For courses in the natural sciences the limit is five years. The time limit may be evaluated in specific instances.

SECOND DEGREE PROGRAM

Applicants holding a baccalaureate with a major other than nursing must follow transfer student admission procedures. They should also arrange for a personal interview with the academic advisor in the School of Nursing.

TEMPORARY TRANSFER

With the approval of the academic advisor, a nursing student may take courses during the summer at an accredited college or university other than Duquesne University. A student wishing to do this will become a temporary transfer student providing he or she receives the necessary clearance from both institutions.

1. A student must bring to the academic advisor both the catalogue description of courses he or she wishes to take and the schedule for the summer session in which they are given. The academic advisor will evaluate the proposed courses and confirm their acceptability for credit.

2. Ordinarily a student who has acquired 60 or more credits may not receive advanced standing for courses taken at accredited community or two-year colleges or have the equivalent of one year of study at Duquesne University.

3. A student is responsible for earning 75 credits or its equivalent, or better if he or she expects to receive advanced standing. The student must arrange to have an official copy of the transcript of grades earned at the institution in which he or she is a temporary transfer sent to the academic advisor in the School of Nursing in order to receive advanced standing. This transcript must be sent immediately upon completion of the course to be transferred.

ADDITIONAL EXPENSES AND REQUIREMENTS

Student Liability Insurance (Professional) for three years: $54.00

Uniforms: nurse's cap, duty shoes, identification pin: $107.00

Transportation to and from clinical agencies (weekly): $10.00 (approx.)

School of Nursing pin if desired: $25.00 (approx.)

Physical examination, diagnostic procedures, and immunizations (cost varies): $500.00

Physical Assessment Kit: $40.00

NLN Achievement Test Package: $10.75 (approx.)

All students entering Nursing II are expected to produce evidence of completion of first aid certification and CPR training. Students will not be permitted to enter clinical without evidence of these competencies. Students are expected to maintain currentness in these competencies as they progress through the program.

An annual physical examination and certain immunizations and health tests are required for all students in the School of Nursing. Pre-clinical students must complete specific health requirements by August 1 to proceed to the Junior and Senior clinical practice. Each student is responsible for transportation to and from hospital and other clinical resources. Each student will be expected to have access to an automobile to permit experience with home care of clients and their families.

STUDENT ORGANIZATIONS

The nursing student is a member of the general stu-
student body and may select and participate in any of the campus organizations. There are numerous social sororities and organizations as well as professional organizations.

Alpha Tau Delta (meaning through force of character) is a national professional fraternity for persons in nursing. The Duquesne University Nursing Honor Society was granted a chapter of Sigma Theta Tau Epsilon Phi in November of 1981. Membership is open to students, faculty, and alumni who meet the criteria for election.

Class Organizations Each of the four classes is an officially recognized organization in the School of Nursing. Each class elects its own officers and conducts such programs and affairs as its members deem desirable toward achieving its goals. All students are included in these organizations.

Honor Awards In addition to graduation honors these awards are presented at Honors Day.

The Mary W. Tobin Gold Medal and The Dean Johnson Memorial Medal are awarded annually to two outstanding seniors chosen by the faculty. The Mary W. Tobin Gold Medal is awarded by the Theta Chapter of Alpha Tau Delta National Professional Fraternity for persons in nursing. It was established in 1945 to honor Mary Tobin on the occasion of her retirement from the University. The Dean Johnson Memorial Medal commemorates Dean Johnson's contributions to the growth of the School of Nursing.

NLN Achievement Tests All nursing students are expected to take NLN Achievement Tests during their academic program. The following achievement tests will be administered as scheduled.

<table>
<thead>
<tr>
<th>NLN Achievement Test</th>
<th>When</th>
<th>First Semester of Year</th>
<th>Nursing III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Science</td>
<td></td>
<td>First</td>
<td></td>
</tr>
<tr>
<td>Medical Surgical Nursing</td>
<td></td>
<td></td>
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<tr>
<td>III Psychiatric Nursing</td>
<td></td>
<td>End of Year/Nursing IV</td>
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<tr>
<td>IV Parent/Child Nursing</td>
<td></td>
<td>End of first Semester</td>
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<tr>
<td>V Community Nursing</td>
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<td>Second Semester Year/Nursing VI</td>
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The student is responsible for all fees.

Graduation Requirements

General University requirements for graduation are in the Academic Policies section of this catalog. In addition specific School of Nursing requirements are:

1. Successful completion of all clinical practicums.
2. Completion of the required curriculum plan.
3. A candidate for the Bachelor's degree must complete the last 30 credits toward the degree at Duquesne University. Challenge credits are not included in this 30 credit requirement.

Degree requirements must be completed within 10 years after initial enrollment. At the end of the 10-year period, the student's record is re-evaluated in terms of the curriculum in effect at that time and the student is advised of any additional requirements for graduation. The responsibility for fulfilling degree requirements rests with the student.

RECOMMENDED COURSE SEQUENCE

<table>
<thead>
<tr>
<th>First Year</th>
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<tbody>
<tr>
<td>Courses</td>
</tr>
<tr>
<td>Natural Science**</td>
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<tr>
<td>Eng 101 - English Comp</td>
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<tr>
<td>Phys 553 - Intro to Psych</td>
</tr>
<tr>
<td>Speech 3</td>
</tr>
<tr>
<td>N 199 - Nursing I*</td>
</tr>
<tr>
<td>Phil 104 - Intro to Phil 3</td>
</tr>
</tbody>
</table>

Second Year

| Bio 207 and 208 - Anatomy 4 |
| Physiology 4 |
| Psychology 4 - Developmental Psychology 3 |
| N 275 - Nutrition 3 |
| Philosophy or Theology 3 |
| N 200 - Nursing II 3 |

Third Year

| N 140 - Nursing III 3 |
| Soc 325 - Family Systems 3 |
| General Elective 3 |
| Nursing Elective 3 |

Fourth Year

| N 460 - Nursing VI 3 |
| Nursing Elective 3 |
| N 470 - Research Process 3 |
| General Elective 3 |

*These courses must be taken during the semesters indicated.
**Prerequisite to Nursing III 3

Natural Sciences Students are directed to enroll in Principles of Chemistry I during the Fall semester and General Biology II during the Spring semester.

Student Rights

Bill of Rights Statement of the student Bill of Rights is available to all students in the Duquesne University Student Handbook. The student handbook can be acquired in either the student government office located in the student union or in the secretary's office of the School of Nursing.

Student of Nursing Student Handbook - A copy of the Student of Nursing Student Handbook is available to all nursing students in the Office of Nursing.

School of Nursing Grievance Procedure - A copy of the Student of Nursing Student Handbook is available to all nursing students in the Office of Nursing.

Grievance procedures must be initiated within 30 days of the occurrence which gave rise to the grievance. With the knowledge of the involved parties, either party may request that another person be present during the discussions. If difficulty arises between student and faculty, the student should first discuss the difficulty with the person directly involved.

If the matter is not satisfactorily resolved, the appropriate course coordinator should be consulted. If the problem persists, the associate dean should then be contacted.

In the event that a satisfactory agreement is not reached, the student should present his/her case before the Student Standing Committee of the School of Nursing.

If the problem is not satisfactorily resolved, a consultation with the dean of the School of Nursing should be arranged.

Should the problem still remain unresolved a request for hearing shall be filed with the Vice President for Academic Affairs within 20 days of the decision.

If the Academic Vice President finds that a legitimate grievance exists he will convene the academic due process committee. In all cases the decision of the academic due process committee is final. If the Academic Vice President finds that a legitimate grievance does not exist, he/she will inform the student within 30 days of the determination.

Curriculum Standards

To progress to the nursing practice courses a minimum cumulative GPA of 2.0 is required with a minimum of a C grade in the natural sciences (Biology and Chemistry) Anatomy, and Physiology including laboratory. Nutrition, Pathology, Nursing I and II, Basic Pharmacology, and Developmental Psychology I and II.

The School of Nursing faculty reserves the right to withdraw any student from the nursing major who in its opinion has not progressed satisfactorily in nursing practice even though the quality point average meets required standards.

Students must maintain a minimum of a C grade in all clinical nursing courses. A Pass/Fail grade is given in clinical practice. An F in either theory or clinical practice will result in an F grade for the course.

Students may repeat non-nursing courses one time only. This includes support courses offered in and out of the School of Nursing. That is Anatomy and Physiology and Lab Pathology Basic Pharmacology and Nutrition. Students may repeat only one course at the 300 level and one at the 400 level in the nursing major.

The student is cautioned to seek regular advice from the faculty and to keep a record of credits earned and the calculated averages. The School assumes no responsibility for such errors. The School recommends the use of the appropriate textbook which may prevent the student from being graduated.

The faculty of the School of Nursing reserves the right to make any changes in the curriculum that seem necessary or desirable.

Course Descriptions

Descriptions of courses in liberal arts and sciences may be found in the College of Liberal Arts and Sciences catalog pages 13 to 57.

199 Nursing I 3 cr

This course introduces the students to the discipline of nursing as a human science. The students in the course explore nursing as a human science in light of the major concepts of man and health. Students are introduced to key themes of the conceptual framework which have been identified as the focus of life change values inquiry, caring and family/nurse/client. Students explore the process of man's coming to know and investigate the historical emergence of nursing as a profession and discipline.

200 Nursing II 3 cr

This course builds on Nursing I. The students examine nursing as a human science in light of inter-relating health and man-in-his-family. Students will examine man as he lives in his health situation and as he participates in the health care system. Students explore the process of valuing nursing research through the growth of nursing theory. Students are encouraged to identify the meaning of responsibility for self as learner moving toward becoming a professional nurse.

212 Pathology 4 cr

The students in this course examine the major processes associated with disease such as infection, inflammation and the immune response. The major diseases are presented as patterns of disturbance. The students are introduced to the role of the pathologist. The students are expected to explore in four-hour laboratory sessions the contents of the pathology laboratory. The students are expected to explore in four-hour laboratory sessions the contents of the pathology laboratory. The students are expected to explore in four-hour laboratory sessions the contents of the pathology laboratory.

255 Nutrition 3 cr

This course studies nutrition principles and their implications to all ages. Topics covered include factors influencing food habits, exploration of ways in which nurses may help families and individuals apply nutrition facts for promotion of health and well-being and recent research in relation to such national problems as obesity and increased life span. Lecture three hours, Sophomore year.

340 Nursing III 9 cr

This is the first clinical nursing course and it builds on Nursing II in which the student begins to examine the processes of life valuing change inquiry caring and the nurse/client family process. In Nursing III these processes will be further explored in relation to man’s unconditional movement as lived through health patterns.

The nurse/client family process is the method used by the discipline to promote health. Use of theory as a base for practice is emphasized. The students will utilize knowledge from the sciences and humanities as he/she practices the nurse/client family process in a clinical setting with clients experiencing changing patterns of health. The course is offered during the Fall semester. Prerequisites: Natural Sciences Anatomy and Physiology Lecture and Lab Pathology Nutrition Pharmacology Nursing I and II, and Developmental Psychology I and II.
The second unit deals with the nurse as a member of the multi-disciplinary health care team. The course focuses on decision-making as a participative endeavor within the nurse/client/family process.

Nursing IV also provides the student the opportunity to explore adult man as he experiences changing patterns of energy in select nurse/client situations. The course is designed to provide the student with the knowledge and skills to be used to explore man and his family's experience of the multi-disciplinary health care team. 

The concept separateness/togetherness continues to be used to explore man and his family's experience of the multi-disciplinary health care team. Prerequisite: Nursing III

NURSING ELECTIVES

260 Ways of Healing
3 cr
This course will explore many of the ways in which clients and their families are involved in the process of healing which are not thought to be medically traditional. The course will begin by looking at man's belief systems and how they affect his life and specifically the healing process. The student will explore the mystery around unconventional or unexpected healing and look at this in relationship to man's belief systems which are a reflection of how man participates in his own health. The student will then look at in depth two ways of healing. One way is biofeedback. The other is visual imagery with relaxation techniques as researched by Dr. Carl O. Simon. The underlying theory will be explored case histories will be discussed and the student will get an opportunity to practice these techniques on himself/herself. In addition the application of these techniques to the nurse/client/family process will be explored. There will also be student group presentations around seven other ways healing can occur. These are psychic surgery hypnosis spiritual healing acupuncture and pressure laying on of hands and hex/hoodoo. Prerequisite: Nriting I

397 Health Care of Women
3 cr
Health Care of Women is a nursing elective that will provide students with an opportunity to explore many of the prevalent health experiences of women in contemporary society. This course investigates aspects of women's health that involve change relative to the quality of their lives. It will provide students with an opportunity to analyze health promotion for women from a nursing perspective. It will provide the student with the knowledge of health resources available to meet the specific needs of women. Prerequisite: Nursing III

398 Communicating with Children Through Play
3 cr
Communicating with Children Through Play is a non-clinical elective for any student who is interested in pre-school-aged school-aged and adolescent children. The focus of the course is on play as an evolutionary life experience. Emphasis is placed on play as a means of understanding children's behavior as a valuable resource for anticipatory guidance with children and as a means for the child to work through some of his immediate life stresses. The participants will expand their perspectives of children's play as a form of communication by observation and evaluation of children's play by utilizing selected techniques. The selected play techniques that will be presented are: Drawings, (draw-a-man, draw-a-family, draw-a-house-tree-person), Pjeg's Question Three Wishes Story Completion, Make-up-a-story, Puppet Play, and Therapeutic Play Interviews. Prerequisite: Developmental Psychology I Open to any University student.

399 Health Education
3 cr
This course focuses upon the nurse's role as health educator and allows the student to explore the dynamic world of health education in today's society. The major issues confronting the nurse as a teacher are emphasized together with the processes of valuing and change in health education. The learning needs of the client-family are carefully scrutinized. The student has the opportunity to write and implement a teaching plan design an evaluation tool and create teaching aids. Prerequisite: Nursing III

399 Nursing and Spirituality
3 cr
This course will initially identify the universal and timeless truth of the spiritual dimension of man's nature. It will then investigate case histories in nursing which focus on spiritual needs encountered in the nurse-client relationship. The student will be encouraged to develop an awareness of his/her own spiritual growth through nursing experiences. In addition the student will discover the gift he/she brings to the nursing situation when spiritual needs are recognized and shared (entered into) with the client. Prerequisite: Nursing III

300 Ways of Relating
3 cr
This course builds on basic communication theory and skills. It offers the student the opportunity to enhance interpersonal relationships through increasing self-awareness and critical analysis of one's own patterns. This knowledge promotes the motivation toward changing the individual's style of relating. The student learns to apply the skills of critical analysis of evaluation and change to simulated nurse/client/family situations. Prerequisite: Nursing III

466 Choosing the Living in Dying
3 cr
Choosing the Living in Dying is a three-credit non-clinical elective for nursing majors. The focus of the course is on dying as an evolutionary life experience. Emphasis is placed on the quality of living throughout the dying process. The learners will develop their perspectives of the dying process and current issues in America related to that process. Meaning will be enhanced through the sharing of thoughts, feelings and perceptions within the group process. Prerequisite: Nursing III

481 Political Accountability in Nursing Practice
3 cr
Political Accountability in Nursing Practice is a three-credit non-clinical nursing elective. The student is involved in learning how to act as a professional nurse in the political system in the United States. A specific method of processing information about public issues will be taught. Individual and group positions on health care issues based on a clear statement of the student's personal philosophy and an analysis of relevant data will be developed. Students will become acquainted with the groups available to professional nurses to assist with data collection. Knowledge of the law and legislative process will be used to make decisions on appropriate actions. Students will contact local state and national legislators for the purposes of initiating dialogue receiving information and stating their positions. Prerequisite: Nursing III

499 Directed Study
3 cr
The course in Directed Studies provides students with the opportunity to pursue an area of individual interest in nursing which is consistent with the curriculum. Students will have the opportunity to generate goals related to the area of interest they wish to pursue and to formulate and implement a plan for achieving these goals. By special permission only.
School of Pharmacy

HISTORY
Plans for establishing a School of Pharmacy were instituted in 1911 when the charter of the University was amended and authority obtained to grant degrees in Pharmacy. On April 20, 1925, the final work of organizing the School of Pharmacy was completed. The first class was received September 21, 1925.

Duquesne University School of Pharmacy is housed in Richard King Mellon Hall of Science whose design by master architect Mies van der Rohe won the Laboratory of the Year award for 1969 in the annual Industrial Research Inc. survey of new science buildings across the country. The School's specialized facilities include the Hugh C. Muldoon Model Pharmacy animal operating room, electronics laboratory equipped with individual kits, biochemistry laboratory, eight additional teaching laboratories and a manufacturing pharmacy laboratory containing basic, pharmaceutical manufacturing equipment and separate tabletting and aerosol technology rooms.

PHILOSOPHY AND OBJECTIVES
The School of Pharmacy as an integral part of the University embodies as its own mission and goals set forth by the University. The School of Pharmacy has many important missions but the primary mission of the School is to prepare practitioners for life-long careers in pharmacy and allied health sciences. Academic training must build sufficient knowledge and skill to allow graduates to practice in the present environment and to grow and adapt as the practice environment changes.

The curriculum in pharmacy represents a composite of educational experiences that results in a well-educated and well-trained professional and offers the undergraduate student a well-rounded and broad education which will inspire a permanent interest in learning. In order to be a competent pharmacist, the student must become a therapeutic specialist who has knowledge of drugs and their actions. Secondly, the pharmacist must possess skills and knowledge to manage a professional practice. The comprehensive and specialized nature of the curriculum offers the Pharmacy graduate a choice of occupations within the profession and an understanding of the various fields as well as an adequate foundation for the continuation of studies on a graduate level in many areas.

Within the profession of Pharmacy, a graduate may become a community pharmacist or hospital pharmacist or a research pharmacist. Many pharmacists find employment as chemists or biologists in industrial and research organizations in allied fields; others enter the profession of teaching. Additional study is required for some of these positions. A few pharmacists continue their study in other health professions leading to a second professional degree or an advanced degree in the basic pharmaceutical and medical sciences.

The School of Pharmacy directs the professional program leading to the Doctor of Pharmacy degree. Those graduates are qualified for placement in clinical pharmacy positions in hospitals across the nation. The School's pharmacists work under the direction of a pathologist or clinical scientist. In the field of Medical Technology positions are available in hospital and industrial laboratories preparing tissue samples and slides for microscopic study taking blood samples storing plasma and keeping records of tests.

In the field of Radiological Health, positions as health physicist are available in hospitals and any laboratories and industrial facilities which use radiotopes. The Graduate School of Liberal Arts and Sciences of Duquesne University offers programs through the Department of Pharmaceutical Sciences leading to the Doctor of Philosophy degree in pharmaceutical chemistry, medicinal chemistry and the Master of Science degree in the fields of pharmaceutical chemistry, pharmaceutical and medicinal chemistry.

DEGREES
The School of Pharmacy offers programs leading to three undergraduate degrees: Bachelor of Science in Pharmacy, Bachelor of Science in Medical Technology and Bachelor of Science in Radiological Health. These are described on the following pages.

Descriptions of advanced degrees offered by the faculty of the School of Pharmacy are found in other catalogs available from the School of Pharmacy office.

PROGRAMS

PHARMACY
The School of Pharmacy offers a Bachelor of Science degree in Pharmacy. Upon completion of the undergraduate professional program, the first two years encompass many courses offered by the College of Liberal Arts and Sciences in addition to several professional courses. The latter three years of study are taught mainly by the pharmacy faculty with electives being available from both that faculty and all other schools of the University. Students are enrolled in the School of Pharmacy for all years. Transfer students are enrolled according to qualifications in the second or third year of the five-year sequence. Legal requirements of all states are met with regard to graduation from an accredited college of pharmacy. Licensure in the several states may be acquired by meeting specific additional requirements of each particular state.

Residency Requirements
The pharmacy curriculum has been designed to provide a sequence of courses leading to professional competence. The minimum time period in which this may be accomplished has been determined by the faculty to be three years of full-time residency. This residency requirement for the final years of the professional curriculum is in accordance with a policy statement ratified by the American Association of Colleges of Pharmacy and followed by all colleges of pharmacy in establishing minimum residency requirements as well as guidelines for professional education. The residency requirement is applicable to all students regarding advanced standing status.

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PROGRAMS

PHARMACY
The School of Pharmacy offers a Bachelor of Science degree in Pharmacy. Upon completion of the undergraduate professional program, the first two years encompass many courses offered by the College of Liberal Arts and Sciences in addition to several professional courses. The latter three years of study are taught mainly by the pharmacy faculty with electives being available from both that faculty and all other schools of the University. Students are enrolled in the School of Pharmacy for all years. Transfer students are enrolled according to qualifications in the second or third year of the five-year sequence. Legal requirements of all states are met with regard to graduation from an accredited college of pharmacy. Licensure in the several states may be acquired by meeting specific additional requirements of each particular state.

Residency Requirements
The pharmacy curriculum has been designed to provide a sequence of courses leading to professional competence. The minimum time period in which this may be accomplished has been determined by the faculty to be three years of full-time residency. This residency requirement for the final years of the professional curriculum is in accordance with a policy statement ratified by the American Association of Colleges of Pharmacy and followed by all colleges of pharmacy in establishing minimum residency requirements as well as guidelines for professional education. The residency requirement is applicable to all students regarding advanced standing status.

Fall Semester
- English Composition: 3
- College Algebra: 5
- Calculus: 4
- Organic Chemistry: 3
- Pharmacology: 3
- General Chemistry: 3
- Medical Microbiology: 3

Spring Semester
- English Composition: 3
- College Algebra: 5
- Calculus: 4
- Organic Chemistry: 3
- Pharmacology: 3
- General Chemistry: 3
- Medical Microbiology: 3

Curriculum
A minimum of 30 credits in the combined general education areas of humanities and social sciences is required for graduation from the School of Pharmacy. Fifteen in the humanities and nine credits in the Social Sciences are required for graduation from the School of Pharmacy. 

The faculty recommends and reserves the right to not approve completion of course clusters in the humanities and social sciences as a means to provide a strong general education for all health professionals.

The student is cautioned to seek regular advice from the faculty and to keep a record of credits earned and the calculated averages. The School assumes no responsibility for such errors appearing in student records which may prevent the student from being graduated.
NEW PHARMACY CURRICULUM*
For classes entering in Fall 1982 and thereafter

**This year is organized on a special calendar that does not coincide with other units of the University. No students may enter the year with any prior course deficiencies. Students may not ordinarily enroll for non-professional courses during this year. With the controlled externship (Practical Pharmacy 39 41) schedule fifth-year Pharmacy students should anticipate possible extra costs for living expenses as well as the loss of income from employment.

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<tr>
<th>Semester</th>
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<td>Fall</td>
<td>General Biology</td>
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<td>Organic Chemistry</td>
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<td>Basic Pharmacy</td>
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<td>Pharmacy Management</td>
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<td>Biopharmaceutics</td>
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<td>Medicinal Chemistry &amp; Natural Products</td>
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<td>Public Health &amp; First Aid</td>
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<td>General Elective</td>
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*Portions of the new curriculum are being phased in for students in the Classes of 1984, 1985 and 1986. As a result of faculty evaluation of this phase-in changes may be made in some parts of the curriculum indicated for the Class of 1987 and succeeding classes.

AREAS OF CONCENTRATION

During the fourth year (earlier if possible) each pharmacy student is urged to select an area of concentration from one of the following areas: Community Practice, Institutional Practice, Industrial Practice, Nuclear Pharmacy, or Pre-Graduate Study. The course clusters represent depth in a professional area of choice. Students may make their own selection of courses in consultation with their advisors.

The following courses are approved for the respective areas of concentration:

1. Community Practice
   - 29-Emergency Management
   - 56-Community Practice I
   - 59-Community Practice II
   - All-Hospital Pharmacy
   - All-Pharmacology
   - 361-Principles of Management
   - 39 41-Practical Pharmacy I II
   - 567-Pathophysiology
   - 200-Patient Education Techniques
   - 201-Social and Behavioral Aspects of Illness and Health
   - 005-Non-Prescription Drugs

2. Institutional Practice
   - 52-Hospital Pharmacy
   - 501-Manufacturing Pharmacy
   - 502-Pharmaceutical Formulation
   - 509-Community Practice I
   - All-Pharmacology
   - All-Pharmacology
   - 361-Principles of Management
   - 539-Bionucleonics
   - 567-Pathophysiology
   - 39 41-Practical Pharmacy I II
   - 540-Patient Education Techniques
   - 541-Social and Behavioral Aspects of Illness and Health
   - 005-Non-Prescription Drugs
   - 813-Clinical Nutrition

3. Industrial Practice
   - 501-Manufacturing Pharmacy
   - 502-Pharmaceutical Formulation
   - 509-Community Practice I
   - All-Pharmacology
   - All-Pharmacology
   - 361-Principles of Management
   - 539-Bionucleonics
   - 567-Pathophysiology
   - 39 41-Practical Pharmacy I II
   - 510-Advanced Biopharmaceutics
   - 522-Spectral Methods
   - 504-Industrial Pharmacy and Governmental Affairs

4. Nuclear Pharmacy
   - 306-Advanced Biopharmaceutics
   - 539-Bionucleonics
   - 540-Advanced Biopharmaceutics
   - 541-Radio-Pharmaceuticals
   - 542-Radiological Health
   - 431-Introduction to Biostatistics

5. Pre-Graduate Study
   - Students who elect this option must consult with the chairman of the department of their area of interest in order to select courses most adaptable to the program they desire to pursue. A combined B.S./M.S. program is available to qualified students.

MEDICAL TECHNOLOGY

The program leading to the degree B.S. in Medical Technology is a joint effort between Duquesne University and Mercy Hospital Pittsburgh, Pa. The program involves the completion of 124 credits, with 30 of the credits being taken in Mercy Hospital's School of Medical Technology in the fourth year of the program. Graduates of the program are eligible for national certifying examinations.

The School of Medical Technology at Mercy Hospital is approved by the National Accrediting Agency for Clinical Laboratory Sciences which acts as adviser to the Council on Medical Education of the American Medical Association. It is responsible for establishing and maintaining high standards of education in A.M.A.-approved schools of medical technology.

Students in the program enroll in the School of Pharmacy as medical technology majors. These students are advised through the Office of the Dean of the School of Pharmacy.
Admission to the fourth year of the program will be on a competitive basis with these as the determining factors:
1. A student must have a minimum quality point average of 3.0 in the sciences.
2. No student with a grade lower than C in any chemistry course will be considered for admission.
3. Written recommendations.
4. Personal interview with the Education Coordinator of Mercy School of Medical Technology.

Applications for entrance to the fourth year are to be submitted to the coordinator of Mercy School of Medical Technology.

Theology in the College of Liberal Arts and Sciences.

The fourth year of the program will begin in June and continue for twelve consecutive months. Courses and laboratory assignments will be held primarily at Mercy Hospital. The following syllabus will be covered with 30 credits awarded for completion of the courses.

## First Year

### Fall Semester
- 101 English Composition
- 105 College Algebra and Trigonometry
- 111 General Biology
- 121 General Chemistry

### Spring Semester
- 102 English Composition
- 115 Calculus I
- 122 General Chemistry
- 3 8 15

## Second Year

### Fall Semester
- 201 General Physics
- 205 Organic Chemistry
- Humanities Elective
- Social Science Elective
- Theology or Elective

### Spring Semester
- 202 General Physics
- 206 Organic Chemistry
- Humanities Elective
- Humanities Elective
- 13 12 16

## Third Year

### Fall Semester
- 17 Anatomy & Physiology**
- 361 Principles of Management
- 27 Analytical Chemistry**
- Electives

### Spring Semester
- 16 Biochemistry**
- 306 Applied Electronics
- Elective
- 13 15 10

## Fourth Year

### Fall Semester
- 431 Intro to Biostatistics
- 473 Atomic Physics
- 540 Advanced
- Elective

### Spring Semester
- 204 Metrology
- 51 Radiological Health
- 483 Nuclear Physics
- 3 4 14

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**D**—Didactic hours  
**L**—Laboratory  
**C**—Credit hours

**These courses may be offered in semesters other than those indicated as the Pharmacy curriculum is revised.
ADMISSION
Students who plan to enter any of the programs offered by the School of Pharmacy are encouraged to meet with the Dean of the School for a personal interview. Entrance requirements are listed under Admission Policies in the General Information section of this catalog. Applications should be submitted as early in the year of matriculation as possible.

The national Pharmacy College Admissions Test (PCAT) may be taken by applicants. Results should be sent directly to the School of Pharmacy and to the Office of the Dean. The test is not required for admission to the School but the results are used by advancement personnel to assess the level of knowledge in pertinent areas related to the program. Transfer performance in certain topics will alert the student to apply for advanced placement examinations.

The School of Pharmacy admits students into each of the first three years of the medical technology and radiological health programs and into the first, second, or third year of the pharmacy program. Procedures for entrance are outlined under Application Procedures in the General Information section.

All transfer students must be interviewed by the Dean or Assistant Dean of the School of Pharmacy. Students intending to transfer to the pharmacy program must have successfully completed the appropriate science and liberal arts prerequisites for entrance into the School of Pharmacy.

Students admitted to the School of Pharmacy are eligible for assistance in high school are encouraged to take advanced placement tests (see Admission section of this catalog). Advanced placement credit for some courses may be awarded for these examinations. Students are advised to investigate carefully the credit equivalency.

Scholars Program
Any student designated as an Admissions Scholar upon entrance to the University and to the School of Pharmacy who has obtained a cumulative average of 3.50 is named to the School of Pharmacy Scholars Program. Students enrolled in any major offered by the School are eligible. Selection is made annually on the basis of academic standing. No application is required. Scholars are recognized annually by a special social gathering, and encouraged to investigate Advanced Placement CLEP and Challenge Examination opportunities, faculty research projects in which they may participate and independent study courses.

Special Fees
Laboratory
Required laboratory courses scheduled by all schools of the University are subject to fees as published. Pharmacy laboratories require a fee of $40 each. A student is assessed for the total costs of all laboratory operations and medical technology and radiological health courses are subject to special fees. No laboratory fees are assessed for courses scheduled in the fourth year of the medical technology program.

Activities
Instituted by student request, this fee of $25 a semester for a minimum of six semesters in an interest in such miscellaneous items as local and national student organizations, American Pharmaceutical Association dues and journal subscription, laboratory jacket fees, class dues and support of the pharmacy student newsletter Plume and partial travel expenses for one required field trip to a pharmaceutical manufacturing firm. Payment is made at registration each semester. This fee is assessed only to those students in the last three years of the pharmacy program.

School of Pharmacy Fee
All students enrolled in any program of the School of Pharmacy are required to pay a fee designated by the University. The fee assists with the special operating expenses of the School of Pharmacy.

Regulations
Students in the School of Pharmacy are preparing themselves for entry into a respected health profession where the highest degree of character and sense of responsibility is required. Basic requirements as such are expected to conduct themselves in all manners on and off the campus in a manner befitting this position and according honor to it. For these reasons the School of Pharmacy insists on strict adherence to the following regulations:

1. Class Attendance Regular class attendance in the School of Pharmacy is normally required for maximum educational advantage. The responsibility for all course material rests wholly with the student.

Under no circumstances will class attendance be used as the sole basis for assigning a grade in a course. This principle shall not modify the prerequisites of each instructor to establish specific policies for attendance at tests examinations class lectures deadlines for reports and other specific school or course requirements.

A student who is unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstance is responsible for notifying the office of the Dean of the School of Pharmacy. The student should supply a written verification as soon as possible. A student who is absent for a reason that is not only a valid excuse, is expected to make up all assignments in all courses and to be familiar with any instructions which may have been given during the absence.

Handicapped students requiring special assistance are urged to notify the class instructor before or at the first class.

2. Academic Standards All students who are admitted to the School of Pharmacy must maintain a 2.0 GPA (quality point average) in the required courses in the professional pharmacy curriculum throughout the program. Students who do not achieve a 2.0 GPA by the end of the first professional year may be admitted to the second year on a probationary basis. No student will be admitted to the third, fourth, fifth or sixth year of the program with less than a 2.0 GPA in all required and in professional pharmacy courses. In the professional pharmacy curriculum, a minimum grade of 2.00 GPA in the pre-pharmacy science and math courses is required for entrance into the third year of the pharmacy program.

3. Required Programs Pharmacy students in the fourth year of the program are required to participate in one institutional visit arranged by the School.

4. The School of Pharmacy arranges for students to participate in a special course in surgical appliance fitting offered by a field representative of a manufacturer of surgical appliances. The biennial programs are required for all pharmacy students in the last two years of the curriculum. Record of participation is made in the students permanent files.

The faculty of the School of Pharmacy may require pharmacy student attendance at other seminars and special programs.

4. Health Requirements Any School of Pharmacy student entering studies in a hospital setting may be required to conform to the health requirements of the hospital.

Student Organizations
The Student American Pharmaceutical Association whose membership includes all pharmacy students registered in the last three years of the School of Pharmacy aims to promote their interests, scholastic, social, and professional. Under its auspices many worthwhile events are arranged during the school year. The executive committee meets regularly with the Dean and the faculty moderator to act as liaison between students and faculty.

The annual membership fee includes one year's student membership in the American Pharmaceutical Association and an annual subscription to its journal. Interested pharmacy students enrolled in their first and second years at the University are also eligible for membership.

The Alpha Beta Chapter of the national pharmacy honor society was established at Duquesne University in 1980. The society recognizes and encourages leadership in the profession of pharmacy. The society consists of students who have completed at least two and one half years in the pharmacy program and have demonstrated exemplary leadership qualities.

Taus Cabo Lambda Kappa Sigma is an international pharmaceutical fraternity for women was established at Duquesne University in 1980. The organization consists of female students, numbers among its members some of the most outstanding women in pharmacy. Its purposes are to promote the profession of pharmacy and to create a center of culture and enjoyment for its members. The hospital named to the School of Pharmacy is open to students in pharmacy.

The Delta Epsilon Chapter of Kappa Psi Pharmaceutical Fraternity was chartered in 1967. This international fraternity strives to develop industry, sobriety and fellowship and to foster high ideals of scholarship and pharmaceutical research while supporting all projects advancing the profession of pharmacy. Membership is open to students in pharmacy.

Class Organizations Each of the five classes is an officially recognized organization in the School of Pharmacy. Each class elects its own officers and undertakes such programs and affairs as its members deem desirable toward achieving its goals. All students are included in these organizations regardless of major curriculum.

Honor Awards
All pharmacy Wholesale Drug Company Award is an award of $50 is presented to the graduate who has shown outstanding ability and interest in the field of pharmacognosy.

American Institute of the History of Pharmacy Award A recognition certificate and gift membership is awarded annually by the American Institute of History of Pharmacy.

110
111
Pharmacy for superior achievement in pharmaceutical historical study or activity
American Pharmaceutical Association Award A certificate of recognition is presented annually to the graduate who has made the most significant contribution to the Student American Pharmaceutical Association at Duquesne University.

Barnard and Blanche Schiller Award in the Humanities and Social Sciences Annually an award of $50 is presented to the graduate who has demonstrated an understanding of the value of the humanities and social sciences in his development as a professional person. This award is to be used for the purchase of books on any aspect of the humanities in which the student is interested.

Beck Award An award of $25 is presented annually to the graduate who has shown outstanding ability and interest in the clinical practice of pharmacy.

Bristol Award An award is presented annually by the Bristol Laboratories Inc. New York City to a Doctor of Pharmacy candidate for excellence in scholastic achievement.

Bristol Award A copy of a standard reference book is awarded annually by the Bristol Laboratories Inc. New York City to the graduate who has in the opinion of the faculty attained unusual distinction in the work of pharmaceutical administration.

Fatally Award The faculty of the School of Pharmacy may present an appropriate award to an outstanding member of the graduating class who has displayed exceptional qualities of academic excellence and a GPA of over 3.75.

Finkenthal Award An award of $50 is presented annually to a student who intends to practice Community Pharmacy.

Galen Society Award The Galen Society of Pittsburgh annually offers two $25 awards to the two members of the graduating class who have achieved the highest standing in the departments of pharmacology and pharmaceutical chemistry.

Samuel W. Carls Award Annually an award of $25 is presented to the graduate who has shown outstanding ability and interests in the field of pharmaceutics.

McNeil Dean's Award A replica of an Early American Mortar and Pestle is awarded annually to an outstanding student of Pharmacy Administration.

Lilly Advancement Award Each year a Lilly Award is presented annually to a member of the graduating class who has demonstrated superior scholastic and professional achievement as well as qualities of leadership and character.

Skys and Dohme Award Each year Merck and Company Rahway New Jersey offers a set of books on any aspect of the humanities in which the student is interested.

A certificate and award of $150 is presented to the graduating senior who demonstrates outstanding ability and interest in the area of Hospital Pharmacy.

Upjohn Company Award A certificate and award of $50 is presented annually by the Upjohn Company Kalamazoo Michigan for outstanding public service.

Pennsylvania Society of Hospital Pharmacists Award Annually an award of $25 is presented to the graduating student who demonstrates outstanding ability and interest in the area of Hospital Pharmacy.

LeWinn Company Award A certificate and award of $150 is presented to the graduating senior who has completed the degree program through unusual and extraordinary perseverance and determination in the opinion of the faculty.

Pennsylvania Pharmaceutical Association Award A certificate of recognition and one-year membership in the PPA awarded annually to the graduate who has been most actively involved in pharmacy organizations.

Folker Scientific Award for Outstanding Medical Technology Student A personalized plaque is presented annually to the graduating Medical Technology student who achieved the highest standing in the clinical program.

Graduation Requirements A committee of the faculty will review the record of each candidate for graduation to ascertain full compliance with specific School of Pharmacy curriculum requirements and the general University Graduation Requirements. As stated in Academic Policies section of this catalog. This committee will then recommend candidates for faculty certification for graduation or for remedial work to be fulfilled during the last semester of residence. Communications pertaining to this certification may be entered in the Office of the Dean.

State Licensing Pennsylvania A candidate for licensure as a Registered Pharmacist in the Commonwealth of Pennsylvania must meet the following requirements before he may be admitted to the licensing examinations which are conducted by the Pennsylvania State Board of Pharmacy.

1. Character—be of good moral character.

2. Professional Training—have a degree in Pharmacy granted by a School or College of Pharmacy which is accredited by the American Council on Pharmaceutical Education.

3. Practical Experience and Internship—any person enrolled as a student of pharmacy in an accredited school or college may be admitted to the internship program of the Board of Pharmacy if he is a registered student of the School of Pharmacy.

4. Application for Registration—any person enrolled as a student of pharmacy in an accredited school or college may be admitted to the internship program of the Board of Pharmacy if he is a registered student of the School of Pharmacy.

To ensure proficiency in the practical aspects of pharmacy the State Board shall by regulation prescribe internship requirements which must be satisfactorily completed prior to issuance of a Pharmacist's License.

Specific information concerning practical experience requirements as well as other requirements concerning licensure may be obtained from the State Board of Pharmacy Department of State Box 2649 Transportation and Safety Bldg. 6th Floor Harrisburg Pennsylvania 17120

States Other Than Pennsylvania According to law the licensing of an applicant seeking to become registered as a pharmacist is under the sole jurisdiction of the state in which he seeks to practice. Although the requirements for licensure in the Commonwealth of Pennsylvania are similar to those of other states differences may exist. Space limitations prevent listing the requirements of other states and the District of Columbia. The candidate for licensure in another state is advised to consult the Board of Pharmacy in that particular state for complete information.

Career Guidance Center A Guidance Center has been established within the School of Pharmacy to keep students informed about the wide variety of positions available in pharmacy. Possessing a pharmacy education and to attract high school and college students to the profession. The Center consists of faculty members. School of Pharmacy students. and pharmacist practitioners. It provides information for career planning and placement. The Center is open to the public. It is staffed by experienced counselors. It is located in the Guidance Center Building which is accessible to those seeking career information on pharmacy opportunities. It is open from 9:00 a.m. to 4:00 p.m. Monday through Friday. It is closed on Saturdays. The Guidance Center is located in the School of Pharmacy Building at 528 Penn Avenue Pittsburgh Pennsylvania 15282.

Research Foundation The Hugh C. Muldoon and Pharmacy Alumni Foundation of Duquesne University established in 1950 to celebrate the twenty-fifth anniversary of the founding of the School of Pharmacy. The Foundation provides funds for improving the instructional and research facilities of the School. It assists in the advancement of pharmacy by supporting the training of undergraduate and graduate students.

The knowledge from research being conducted under the auspices of the School will be shared with those who support their work. The knowledge from research being conducted under the auspices of the School will be shared with those who support their work.
DEPARTMENT OF PHARMACOLOGY-TOXICOLOGY
Chairman Gene A. Riley Ph.D.

1. Drug Abuse 1 cr
A course designed to present the pharmacological and toxicological properties and interactions of the major classes of drugs are described with direct reference to toxic and adverse effects. The myths and misconceptions commonly attributed to substances of abuse are clarified. The philosophy of the course is to present an objective picture of the drug abuse era in this country. The course is intended for all students beginning their collegiate studies. Admission to this course for students who have completed PH 33 or its equivalent is by approval of the instructor.

2. Basic Pharmacology 3 cr
A course dealing with the major classes of therapeutic agents designed for students with a limited background in biological sciences. Drugs are considered from a disease state point of view and include basic pharmacology and mechanisms of action. Important drug interactions as they relate to patient care are included. Not open to Pharmacy Students. Prerequisites: Six credits of biological science including physiology. Lecture three hours.

3. Social Diseases 1 cr
Covers control of diseases prevention treatment and social effects of venereal diseases. Awareness and common sense should be awakened in students by the course. Lecture one hour. Open to students who have not completed Pharmacy 33.

4. Pharmacology and Toxicology of Non-Prescription Drugs 3 cr
A course designed to familiarize students with the pharmacological and toxicological properties of over-the-counter drugs. The course will prepare the student to counsel the public on the appropriate use of OTC drugs to select the proper non-prescription drug for a particular disease state and to determine if treatment with a non-prescription drug is appropriate. Lecture three hours.

5. Medical Microbiology and Immunology 4 cr
Covers the general characteristics and morphology of bacteria; the important staining techniques of growth of bacteria on artificial media; testing the effects of chemotherapeutic agents on pathogenic bacteria; and immunology. It includes discussions of the importance of bacterial rickettsias, viral, and protozoal diseases along with worm infestations: their causes; symptoms; and treatments. Lecture three hours; Laboratory three hours.

6. Public Health 4 cr
A discussion of Public Health measures such as immunization, water purification, sewage disposal, treatment of contaminated individuals and objects, control of rodents and insects, and the relationship of these to the spread of disease. Health statistics, disease, prevention and environmental pollution are also discussed. Lecture three hours.

7. Anatomy and Physiology 4 cr
A continuation of Anatomy and Physiology 17. Prerequisite: Anatomy and Physiology 17. Lecture four hours.

8. Pharmacology 4 cr
A course designed to acquaint the student with the philosophy of law and its relationship to pharmacy. Federal, state, and local laws and regulations pertinent to the handling and sale of drugs, cosmetics, narcotics, poisons, and alcohol are discussed. A review of antitrust laws, trade regulations, and court decisions of importance to the pharmacist is included. Elements of business law and civil responsibilities of the pharmacist are also covered. Lecture three hours.

9. Pharmacy Administration 3 cr
A course designed to familiarize the student with the diverse social political and economic factors affecting the practice of pharmacy. The course considers the persons, places, and activities involved in providing health care services with special emphasis on the role of the community pharmacist. Lecture three hours.

10. Practical Pharmacy 1-2 cr
Practical Pharmacy Program required of all final year pharmacy students and involving placement in operating pharmacies with a pharmacist preceptor. Off-campus placement may be necessary. Note: collaboration and change for fifth-year students may be required.

11. Social and Behavioral Aspects of Pharmacy 3 cr
A course designed to examine the current theory and research in the psycho-social correlates and consequences of illness and health. Topics will include the general areas of social stress research, theories of psycho-somatic medicine, the impact of social-
Clinical Clerkship & 3 cr
An educational process designed to provide the student with clinical experiences necessary to demonstrate competence in areas of providing patient education, ascertaining drug history, participating in the selection and monitoring of therapeutic modalities and other pharmacist-related functions. The student will be assigned to a member of the clinical faculty and a given practice site

DEPARTMENT OF MEDICAL TECHNOLOGY

Director Jeanne A. Cooper M.D. Education Coordinator M. Elaine Linkhauer M.T. (ASCP)

61. Clinical Chemistry 7 cr
A comprehensive study of the chemistry and metabolism of proteins, carbohydrates, lipids and electrolyte enzyme and hormone systems as revealed by the various examinations performed on blood and other body fluids.

62. Urinalysis 2 cr
The study of renal function and its abnormalities as portrayed by alterations in the composition of the urine.

63. Hematology 5 cr
Detailed study of the anatomy and physiology of the blood and various laboratory methods used in establishing inherited or acquired abnormalities of blood and blood forming organs.

64. Blood Banking 3 cr
Essentials and importance of proper selection of blood for transfusion, pretesting methods, records and administration of blood. Also included are studies of tests pertaining to sensitization.

65. Bacteriology 5 cr
The study of clinical bacteriology including culture methods, biochemical and immunological aspects of identification, and the application of these to the diagnosis of disease.

66. Parasitology 2 cr
Methods of identification of various parasites infesting man with detailed study of their morphology and habits.

67. Immunology 2 cr
Study of the procedures used in analysis of immune mechanisms of the body and their application in disease processes.

68. Mycology 1 cr
The study of the pathogenic fungi, the diseases they cause and the technical methods of identification.

70. Virology 1 cr
The study of the viruses causing disease and the technical methods of identification.

71. Nuclear Medicine 2 cr
The study of the use of radiotracer diagnoses and treatment of disease.
DEPARTMENT OF RADIOLOGICAL HEALTH

Chairman Mitchell L. Borke, Ph.D.

RECOMMENDED PROFESSIONAL ELECTIVES

The following courses offered by the Graduate Department of Pharmaceutical Sciences are available to qualified upperclassmen in the School of Pharmacy:

401 Manufacturing Pharmacy
402 Pharmaceutical Formulation and Development
410 Advanced Biopharmaceutics
422 Spectral Methods
423 424 Advanced Medicinal Chemistry I and II
439 Bionucleons
540 Advanced Bionucleons and Radio-Pharmaceuticals
541 542 Radiological Health I and II
560 Biosynthesis of Natural Products
561 General Toxicology
563 Pathology
566 Clinical Toxicology
567 Pathophysiology
569 Toxins Their Chemistry, Biology and Toxicology

Students are encouraged to view these electives with the aim of providing an appropriate depth of knowledge in the areas. Each cluster is intended to offer an interesting sequence of electives that will count toward minimum elective requirements of all programs in the School.

Department of English—
1) 201, 202 English Literature Survey
2) 205, 206 American Literature Survey
3) 210, 211 World Literature Survey
4) 207 plus courses in Film as Literature Science Fiction
5) Literature of Crime and Detection

Department of History—
1) 305 History of Medicine 307, 308 History of Science
2) 231, 232 Development of the United States
3) World History
4) American History

Department of Mathematics—
1) 121 or 122 Calculus I or II
2) 212 Calculus III

Department of Psychology—
1) 101, 102, 201, 202, 305, 306 Psychology

Department of Speech Communication—
1) 103 Courses suggested under minor

Department of Philosophy—
1) 104 105 or 107 106

Department of Political Science—
1) 101 Courses suggested under minor

Department of Theology—
1) 101 Courses suggested under minor

Fine Arts—
1) Courses suggested under minor

Any course taught in the University may be chosen as an elective course by students who have met the prerequisites. Descriptions for courses outside the School of Pharmacy may be found in the appropriate section of the University catalog.

ELECTIVES—COURSE CLUSTERS

The following courses in liberal arts and sciences were especially selected by the several departments to support and complement pharmacy programs:

1) 245 246 247 248 An Introduction to Literature
2) 203 204 205 206 301 302 303 Greek Language and Literature
3) 101 102 201 202 305 306 Latin Language and Literature

RECOMMENDED ELEETIVES FOR RADIOLOGICAL HEALTH

106 Logic
104 Introduction to Philosophy
105 Ethics
107 Medical Ethics
101 Introduction to Political Science
312 International Law and Organization
103 Introduction to Psychology
101 Survey of Sociology
323 Medical Sociology
201, 202 English Literature
231, 232 Development of the United States
305 History of Medicine
307, 308 History of Science
204 Interpersonal Communications
121 Elements of Economics
203 Genetics

A course devoted to the practical applications of radioisotopes in chemistry, biology, and medicine. The scope of the course includes neutron activation analysis, gamma spectrometry, tracer methods, and radionuclides. Prerequisites: Bionucleons 539

A course designed to review the fundamental physical and biological principles of radiation protection and the application of these principles to the measurement techniques, radiation hazard evaluation, radiation protection surveillance, and administration. Scientific principles most applicable to solving the problems of protecting humans from unacceptable levels of radiation exposure both in occupational and public environment are emphasized.
Reserve Officers’ Training Corps

DEPARTMENT OF MILITARY SCIENCE (ARMY OFFICERS’ COMMISSIONING PROGRAM)

Department Head: Captain Hans G. Heiser

PROGRAMS

The Army Reserve Officers Training Corps (ROTC) Program has been a part of the Duquesne Family since 1936. It is a completely voluntary program which is open to all male and female students at Duquesne. It provides students with the opportunity to earn a commission as an officer in the U.S. Army, U.S. Army Reserves or Army National Guard. After commissioning students serve as an officer in the Reserves or National Guard while pursuing their chosen civilian careers or compete for active duty. The program is structured to give the student a variety of practical experiences in leading and managing people and resources while learning about the military profession and the role it plays in the system of government. Four-year and two-year programs are offered; both of which are taken in conjunction with a student’s required or normal course of study leading to a degree.

FOUR YEAR

The four-year program is divided into two parts: the Basic Course and the Advanced Course. The Basic Course is usually taken in the freshman and sophomore years during which time the student would take ROTC courses as they would any other college course. There are no military service obligations or special requirements of any kind. The freshmen and sophomore courses follow an adventure skill learning and leadership track which is designed to enhance self-confidence and provide new experiences and place students in realistic leadership situations. Freshmen learn survival techniques such as handling and firing a rifle and how to navigate cross-country using a map and a compass. Sophomores learn about leadership management and the role of the military in the United States. The Basic Course may be compressed into less than a two-year period if the student meets certain prerequisite conditions.

Basic Course Curriculum

Freshmen (MS I)

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 101 Survival Techniques</td>
<td>0-1 cr</td>
</tr>
<tr>
<td>Sophomores (MS II)</td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 201 Leadership and Management</td>
<td>0-1 cr</td>
</tr>
<tr>
<td>MS 202 Introduction to Military Skills</td>
<td>0-1 cr</td>
</tr>
</tbody>
</table>

After completing the Basic Course, students who have demonstrated officer potential and meet Army physical standards are eligible to enroll in the Advanced Course. The Advanced Course is normally taken in the final two years of college. Therefore, at the beginning of the junior year, the student must decide whether he/she wishes to become an officer and enter the advanced phase of the program. Students who enter the Advanced Course receive a tax-free living allowance of $100 per month during the school year. The junior year is training-oriented and prepares students for six weeks of rigorous field and leadership training that they receive at Fort Bragg, NC at the end of the academic year. The senior year further prepares the student to perform the duties of an officer. It covers such subjects as military law, administration, logistics, staff functions, professionalism, ethics and military training. Leader development is continuously emphasized.

Advanced Course Curriculum

Juniors (MS III)

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 301 Military Skills Development</td>
<td>0-2 cr</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 302 Military Skills Development</td>
<td>0-2 cr</td>
</tr>
<tr>
<td>Summer Between Junior and Senior Year</td>
<td></td>
</tr>
</tbody>
</table>

Attend a six-week ROTC Advanced Camp

Seniors (MS IV)

Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 401 Professional Seminar</td>
<td>0-2 cr</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS 402 Professional Seminar</td>
<td>0-2 cr</td>
</tr>
</tbody>
</table>

DIRECT ENTRY INTO THE ADVANCED COURSE

Students may receive placement credit for MS I and II and be granted direct entry into the Advanced Course. This placement credit may be granted for:

1. Completion of Army Basic Training or its equivalent in the Navy Air Force Coast Guard or Marine Corps
2. Attendance at a service academy for one or more years
3. Completion of equivalent level training in Navy or Air Force ROTC
4. Completion of three or more years training in Junior ROTC (any service) or NDCDC

EARLY COMMISSIONING

Many students are able to complete the requirements for commissioning prior to graduation through the direct entry concept. These students may be commissioned upon completion of the Advanced Course permitting them to serve in salaried positions with the National Guard or Reserves while completing their degree work.

SIMULTANEOUS MEMBERSHIP PROGRAM (SMP)

This program permits students to participate in the Army ROTC Advanced Course and serve in a Reserve or National Guard unit as an officer trainee at the same time. The advantage to SMP is that the student will receive regular drill pay from the Reserve or National Guard as well as the $100 per month living allowance for participating in the Army ROTC.

TWO-YEAR PROGRAM

The two-year program is designed primarily for transfer students and students who did not participate in ROTC as freshmen or sophomores. Any student with at least two academic years remaining undergraduates and graduates is eligible. Students may qualify for this program and enrollment in the Advanced Course by successfully completing a paid summer camp at Fort Knox, KY.

ARMY ROTC SCHOLARSHIPS

Army ROTC offers four three and two-year scholarships which are awarded on a competitive basis. ROTC students as well as those students not currently participating in ROTC are eligible to apply. Each scholarship pays for tuition, textbooks, laboratory fees and other purely academic expenses. Scholarship students also receive a tax-free living allowance of $100 each month during the school year while on scholarship status. For details see the ROTC Scholarship listed in the Financial Aid Section of this catalog on page 222.

MILITARY SCIENCE CURRICULUM

THE BASIC COURSE (Military Science Levels I and II)

Military Science (MS) 101 Survival Techniques

This is an introductory course designed to prepare students to recognize survival situations, determine directions, navigate at night, rappel, find and prepare shelters, construct shelters, and tie knots. This class is scheduled both semesters and is normally attended during the summer following the completion of this course.

Military Science (MS) 102 Individual Skills

The course will provide an introduction to the sport of orienteering which is a combination of cross-country running and land navigation using the aid of a topographical map and a compass. Instruction is presented on map reading, the use of the compass and how to move quickly and safely through all kinds of terrain.

Military Science (MS) 201 Leadership and Management Techniques

This is an introductory course into basic management and leadership techniques and includes effective communications techniques, small group processing leadership traits and styles, decision-making and problem-solving techniques. The course is also designed to provide the student with the tools for a self-analysis of his/her management capability and the methods for improvement.

Military Science (MS) 202 Introduction to Military Skills

This course introduces the student to the United States Army and provides an inside view of ROTC and the Army to include its organization, missions and functions. The course will discuss officer career fields, duties, and responsibilities of junior leaders. Additional education programs pay promotion assignments, customs and traditions of the Army, and the significance of military courtesy and discipline. The student will be introduced to the operation of the basic military team—the squad.

THE ADVANCED COURSE (Military Science Levels III and IV)

Military Science (MS) 301 and 302 Military Skills Development

This course requires a full school year to complete. In addition to the two hours per week of instruction and practical application exercises on campus the student periodically attends training exercises on weekends throughout the school year. The course provides the student with instruction and practical experience in tactical and technical military subjects with particular emphasis on leadership development. The central theme and primary purpose of the course is to prepare the student for attendance at the six-week ROTC Advanced Camp at Fort Bragg, NC which is normally attended during the summer following the completion of this course.

Military Science (MS) 401 and 402 Professional Seminar

To take this course the student must have satisfactorily completed MS 301 and 302 as well as ROTC Advanced Camp. The course meets two hours per week and is a systematic and comprehensive study of professional subject matters designed to facilitate the transition from student/cadet to officer. It is comprised of two modules: Module I (MS 401) Administrative/Staff Operations and Procedures, is taught in the fall semester. Module II (MS 402) Military Law and Justice, is taught in the spring semester.

THE COMMON HOUR

Military Science (MS) 100 Cadet Corps Laboratory

The Common Hour and Cadet Corps Laboratory are synonymous. This class is scheduled both semesters meeting once a week for one hour. The Cadet Commander uses the lab to disseminate information and to organize the activities of the Corps of Cadets. All students are required to attend unless the conflict exists between this class and their academic course work.

VOLUNTARY ADVENTURE AND SOCIAL ACTIVITIES

In an urban environment it is not possible to provide students with the kind of surroundings suitable for the conduct of such activities as rappelling and small unit tactics. Therefore off-campus sites on
weekends are utilized in order to effectively apply techniques taught in the classroom.

Weekend activities are student-run and instructor-supervised. For this reason, these activities are ideally suited for cadets to practice leadership and organizational and military technical skills. Some weekday or weekend evenings are set aside for social activities which incorporate exposure to national and military technical skills.

Some of these activities include America Dining-In, the Military Ball, an Awards Ceremony, and the Annual ROTC Commissioning Program. All of these activities (adventure and social) are conducted with the combined elements of the Pittsburgh Senior ROTC Instructor Group (PSRIG). Universities represented in addition to Duquesne are the University of Pittsburgh and Carnegie-Mellon University and those institutions in the city which have students cross-enrolled into one of the three detachments of the PSRIG.

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Part III: Student Services, Programs, and Organizations

**Student Life**

**Office of the Dean of Students**

The Dean of Students coordinates the following departments: Athletics, Health Services, Residence Life, and Duquesne Union. In addition, the Dean of Students Office is responsible for the following programs: Early Alert Leadership Training, Returning Students Center, Mini-Courses, Commuter Concerns, Alcohol Awareness, Honor Societies, and Interact.

The Student Affairs area provides the student with opportunities to benefit from a variety of experiences with fellow students, faculty members, and administrators, as well as initiating new programs, implementing change, and participating in the essential processes of University governance on many levels. The Office of the Dean of Students is responsible for coordinating and implementing several programs and services which provide individual students and groups with opportunities for personal, intellectual, and social growth. In addition to providing counseling services and coordinating the University Judicial System, the Dean of Students Staff is responsible for Orientation, Freshman/Transfer Assistance Program, College Skills, Special Scholarships and Awards, Disabled Students, International Students, Life Planning Seminars, and Positive Profile Records.

**Council on Student Services**

The Council is chaired by the Dean of Students and includes student representatives of the Student Government Association, Commuter Council, University Judicial Board, Panhellenic Council, Residence Council, Interfraternity Council, and YMCA. The Council includes representatives of all Student Affairs Departments as well as Financial Aid, Campus Ministry, Public Safety, and Physical Plant. The purpose of the Council is to foster communication and interaction among the various student organizations, staff members and departments, and to facilitate improvement in the quality of life of Duquesne University students.

**College Skills**

Essential to the education process is the acquisition of learning and decision-making skills which are not necessarily provided in the traditional curricular structure of the University. Such survival skills are both technical and developmental in nature and include time management, note-taking, preparing for examinations, efficient reading, self-assessment, decision making, value clarification, interpersonal communication, goal setting, and career awareness. Assistance in all of these areas is available in the Office of the Dean of Students.

**Disabled Students**

The Office of the Dean of Students coordinates and provides services available to students with disabilities. The office serves as an advocate for disabled students at Duquesne and surveys the needs of these students and develops programs to meet their needs. Specific services currently available include reading and typing service for the blind or dyslexic students, and orientation to campus facilities.

The Office of the Dean of Students serves as a liaison with the Registrars Office in changing classroom locations if necessary for students in wheelchairs with the Department of Public Safety in obtaining special parking permits for disabled students and with the Affirmative Action Officer and Physical Plant in identifying and correcting physical facilities and barriers.

**International Students**

The responsibility of the International Student Advisor is to be of service to all international students in the area of personal counseling and adjustment. Other services include preparation of forms to obtain employment and to do practical training. The International Student Advisor is located in the Office of the Dean of Students.

**University Judicial System**

The University Judicial System is administered by the Dean of Students Office. The University Judicial Board plays an important role in developing responsible student conduct. The Board serves to protect the rights and freedoms of all students while acting as a check to ensure that these same rights and freedoms are not misused within the context of students' responsibilities to the University. The Board has a student chairperson and is comprised of administrators, faculty, and students.

When a student has violated a policy or procedure, the Director of University Judicial Systems, in a confidential hearing, hears from all parties involved after which a decision is made based on the evidence presented. If the student is found guilty, a sanction will be determined by the Director.
ties are minimized and emphasis is placed on the rights and responsibilities that exist between the individual student and the University. Rights and responsibilities of the University and students are outlined in the Duquesne University Code of Student Rights, Responsibilities, and Conduct to which each student should become familiar.

ATHLETICS

Duquesne University is a member of the National Collegiate Athletic Association, the Eastern Collegiate Athletic Conference, and the Association for Intercolligate Athletics for Women and the Eastern Association for Intercolligate Athletics for Women and the Pennwood West Conference. The University follows the rules of these organizations in determining a student's eligibility for varsity team participation in basketball, coed volleyball, chess tournaments, public safety, and other coed activities. The Athletic Department fields varsity teams in the following sports: baseball, basketball, cross country, golf, rifle, swimming, and tennis for men as a member of the NCAA, and basketball, volleyball, swimming, and tennis for women as a member of the Mid-Atlantic Interscholastic Athletic Conference. The Department also sponsors a co-ed bowling team which competes in the Club League of Western Pennsylvania and a club hockey team. Although they are primarily men's sports under the NCAA, women's teams are eligible and have competed on the golf and rifle teams.

The men's varsity basketball team Division II competes nationally as a member of the Eastern Athletic Association. In Intramurals

The Intramural Program at Duquesne offers a variety of sports. Beginning in September, the program offers a tennis tournament three touch football leagues, basketball two-man heart, and volleyball. During the spring semester, students can participate in basketball, coed volleyball, a chess tournament, street hockey, two-man hearts, and foul shooting. The Intramural season ends in March with softball ultimate frisbee, and marathons.

For further information and rules concerning the various sports, contact the Intramural Director in the main gym.

The Women's Health Club is located in University Hall and a Weight Room is available in the main gym.

HEALTH SERVICES

The University Health Service is located on the second floor of the Duquesne Towers Residence Hall. During the Fall and Spring semesters, nursing service is available Monday through Friday 8:30 a.m. - 8:00 p.m. Saturday and Sunday 11:00 a.m. - 2:00 p.m. A physician is available Monday through Friday at specified hours. During summer months, nursing and physician services may be limited.

Primary health care provided for all resident students and commuter students who choose to enroll in the University's Community Health Plan. Fax Aid and referral services are provided for faculty, staff, and visitors. A completely equipped ambulance is maintained by the University. Should an emergency occur in the University, the Public Safety System should be contacted immediately at 434-6002 to provide services of E.M.T., treatment or diagnostic procedures. As a non-University physician's diagnosis or hospital must be paid by the student or his family.

Health Insurance

It is recommended that each student carry some form of health insurance. The University provides a Student Health Care Program which has been designed to meet the needs of the student and is priced lower than individual health insurance policies. Complete information about the insurance plan may be obtained from the University Insurance Officer. Second Floor of the Administration Building. The University is not responsible for medical expenses resulting from participation in intramural sports. All International Students are Required to Carry Health Insurance.

RESIDENCE LIFE

Residence Life is dedicated to the task of creating an environment in which a student can grow and develop as a total person. Its program is based on two assumptions: 1) the student's residence hall living experience can be an important part of the total University education and 2) the residence hall staff has a defined educational mission which can greatly enhance the opportunities for students to profit from their residence hall experience. Therefore, it is the purpose of Residence Life to facilitate the personal and academic growth of student living by striving to make the whole of residence life an educational experience. To this end, the professional and resident assistant staff will provide the wherewithal to facilitate such development.

Recognizing that each individual has unique talents and potentials, every effort is made to create a residence hall environment that is acceptable to each individual and open to his or her effort on this environment. It is the student who actively becoming part of the environment enriches his or her own development. It is this aim that University living strives to accomplish.

In the belief that residence living adds to the educational opportunities of the individual student, the University reserves the right to require all undergraduate students who do not commute from their permanent home or residence to reside in University residence halls. This policy limits implementation of this requirement to freshman and sophomore students.

Residence hall space has been at a premium. Many students do not reside in residence halls because they did not turn in their room contract and $100 deposit. Therefore, it is imperative that students wishing to live in the residence halls complete and return their contract and deposit as early as possible since students are assigned available space on a first-come, first-serve basis.

The University does not accept the responsibility for loss or damage (from any cause) to the personal property/effects of the student, nor will the University assume responsibility for any personal liability which may result from damage. It is suggested that students carry personal liability and property insurance.

STUDENT LIFE

The Office of Student Life administers the programs and services of the University as well as the services and programs of the Duquesne University YMCA. It is the responsibility of the Dean of Student Life, Director of Union Operations, Director of Programs and Activities, Director of Recreation YMCA, and a graduate assistant to collectively administer the Union and Student Life services and to carry out the responsibilities which are outlined in the Duquesne University Code of Student Rights, Responsibilities, and Conduct.

Duquesne Union

The Duquesne Union is more than a unique building. It is an organization a program a service an experience, and a spirit that has spread through Duquesne since it opened in March 1967. It is a unique partnership of professional staff, faculty, and students working together to provide the experiences necessary to develop mature, effective members of society.

Participation in the Union offers individuals the experience they need to develop their unique talents and personalities. They learn to synthesize and express their ideas and beliefs. Included in this is the opportunity to learn and apply leadership techniques and plan and present programs and activities for the campus and community.

With a goal of community, all aspects of the Union—programs, facilities, and committees—are open to the entire campus. It is not the Student Union but the Duquesne Union.

Union Program Board

The Union Program Board is a student organization designed to enhance the entire Duquesne Community. The UPB, through its various committees, provides cultural, recreational, educational, and social programming for the entire campus.

The UPB provides a variety of entertainment, including art exhibits, concerts, guest speakers, dance, and events. Its purpose is to provide a forum for the creative programming ideas that its members come up with. It also offers such services as promotion resources for other campus organizations and groups.

The UPB offers its members a chance to gain effective skills in leadership, group process, organization, and communication. It also provides the opportunity for students faculty and administration and alumni to interact and get to know and understand one another through informal association.

The Union Program Board consists of five committees.

The Committee on the Arts (COTA) strives to enrich Duquesne with fine arts and crafts exhibits and workshop sponsors student and professional drama, dance, and mime performances and offers various discounts to such places as museums, ballets, Fallingwater, and New York City.

The Social Committee seeks to satisfy various musical tastes while complementing the social programs sponsored by other organizations on campus. These include Student Life, Craft Houses, and other social events.

The Forum Committee presents speakers as well as dramatic presentations concerning topics of contemporary interest. They also utilize campus resources in sponsoring minicourses that are sponsored by the faculty or administration.

Special events such as the College Bowl and the University on campus and off-campus activities are included in this list. This is an activity fee promotional telephone service for campus events.

Everyone is welcome to join the Union Program Board and may do so by obtaining an application in the UPB Office (Third Floor Union)

Recreational Center

The Recreational Center is located on the First Floor of the Student Union. It provides a wide variety of recreation activities, including open and league bowling, shoe rental, billiards, ping pong, arcade machines, table soccer, and various board games. Several tournaments or other campus and national events are held throughout the year.

Other Recreational Centers include Reading and TV Lounge, and Emporium carrying many recreational and craft items and custom T-shirts for sale at reduced prices.

The Student Union Pool is located in the Towers and is open to all students faculty and staff at no charge. Hours of operation are posted at the pool.

Information Center

The Information Center is located on the third floor of the Student Union. It provides a central point on campus for dispensing and obtaining information. It is in the center of campus and students will have no trouble finding where they are going. Included among the numerous services provided by the Information Center are:

- Student organization mailboxes (city)-n-nyepost
- Daily and weekly New York Times on display in the Student Union.
- The Union Program Board is open to all students faculty and staff at no charge. Hours of operation are posted at the pool.
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- The Union Program Board is open to all students faculty and staff at no charge. Hours of operation are posted at the pool.
Successfully developed career planning and placement program and other services.

**Career Planning and Placement**

Students and graduates of Duquesne University have available to them the full services and programs of Career Planning and Placement. Persons with uncertain or changing vocational goals may seek career planning through personal contact with the professional staff and use of the career resources. Early use of the service is encouraged.

The individual with well-defined career goals may seek employment advice including resume preparation, job application and interview techniques. Job referrals and credentials. The graduating student may also be interested in campus interviews with visiting employers. Any student group or academic department may contact Career Planning and Placement for aid in developing a career program and/or in securing a career speaker.

The part-time and summer employment program is important to students in gaining experience and to those seeking practical experience to augment college training. Placement in campus jobs is largely voluntary although not totally dependent upon financial need. Part-time and summer jobs in the community are also available with new listings arriving daily.

**Learning Skills Program**

The Learning Skills Program is located on the third floor of the Administration Building and provides a variety of academic services. These services are provided in coordination with academic offices of the University. As part of this academic assistance, the Learning Skills Program delivers diagnostic and prescriptive services. Individualized developmental programs in reading, writing, mathematics, and science are offered.

A free tutorial service provides students with competent tutors in numerous subject areas. In addition, a comprehensive study skills program is available to help students prepare study skills, as well as to assist students experiencing academic difficulties.

The program is free to all Duquesne University students.

**The Testing Bureau**

The primary role of the Testing Bureau is to provide the student with the opportunity to explore interests and abilities as they pertain to choosing a degree major or minor and planning a career. Trained counselors focus upon test results and the student's personal style when considering the student's questions or concerns. Counseling is also available to students whose concerns are of a more personal nature such as adjusting to college life, anxiety, etc. Professional assistance with study skills test anxiety and personal concerns is available in both individual and group counseling formats.

**CAREER DEVELOPMENT**

CAREER DEVELOPMENT is a coordinated guidance counseling and referral program with students experiencing academic difficulties seeking advice and assistance. The Testing Bureau regularly administers the PSYCHOLOGICAL CENTER FOR TRAINING AND RESEARCH.

**STUDENT GOVERNANCE**

There are more than 100 active student organizations at Duquesne. Some serve the needs of specific interest groups as well as those of residents and commuters. Other relate directly to major areas of study. Some honor academic achievement. Many are formed to meet religious service or social needs and interests. Whatever their purpose these organizations and their activities comprise a major part of campus life.

**HONOR SOCIETIES**

These societies have as their primary purpose recognition of academic excellence and leadership achievement and are members of the Association of College Honor Societies.

**PROFESSIONAL AND DEPARTMENTAL ORGANIZATIONS**

These professional organizations exist to provide the membership with the growth of informal exchange of ideas pertinent to the students academic pursuits. These organizations sponsor programs including debates, symposia and lecturers.
SERVICE ORGANIZATIONS
The purpose of these nationally-affiliated organizations is to provide a high standard of service to the campus and local communities while at the same time developing the leadership qualities of and cooperation among each member of the organization. With this purpose in mind, service organizations sponsor a wide variety of professional service charitable and social programs.

SOCIAL ORGANIZATIONS
Social organizations are composed of college men and women who have joined together to enhance their identities by sponsoring and promoting social athletic cultural and academic events. Many of these organizations belong to Inter-Fraternity Council of Panhellenic Council.

PERFORMANCE GROUPS
TAMBURITZANS
The Duquesne University Tamburitzans were founded in 1937 at the University and were the first university-based performing folk ensemble in the United States. The group takes its name from the Tamburitz family of stringed instruments indigenous to the folk cultures of Southeastern Europe. The group exists for the dual purpose of preserving and perpetuating the Eastern European cultural heritage in the United States and offering scholarship opportunities to deserving students.

THEATRE
The Red Masquers serves to provide an extracurricular outlet for students who wish to participate in the theatre. Its aim is to provide the University and its students with educational and cultural benefits that accrue from a dramatic program. In line with these objectives, the Masquer's program offers a variety of stage entertainment—one-act plays musicals comedies tragedies. Any Duquesne student is eligible for membership.

MEDIA ORGANIZATIONS
WDUB RADIO AND TELEVISION
The University's radio station (WDUB—90 S FM) and television (closed circuit) provide academic support to the individual schools and departments through seminars, workshops, laboratory experience and extracurricular opportunities in communication skills for individuals and groups. Most positions on the staff are filled by students. The University radio station operates on a 25,000 Watt frequency over a radius of seventy miles.

WDRC
This radio station, purchased by Residence Council and operated by students, provides music and announcements in the Duquesne Tower's Cafeteria during the lunch and dinner hours. Students interested in being disc jockeys and/or announcers on WDRC should contact Residence Council.

PUBLICATIONS
The Duquesne University Code of Student Rights Responsibilities and Conduct
The Student Code is the definitive statement of standards, policies and procedures regarding student rights and responsibilities. Campus organizations, student governance, student records, student conduct and the University Judicial System. Copies are available at the Duquesne Union Informational Center and the Office of The Dean of Students.

The Duquesne Duke: the University campus newspaper is written and edited by the students for the students. It appears every Thursday during the academic year except during examination periods and holidays and provides an array of campus news student opinions, editorials, and advertisements. The paper is geared to all members of the University administrators, faculty members, employees, and most of all students. Membership in the Duquesne Duke is open to all students.

The Duquesne Magazine: a literary publication published each semester which affords students the opportunity to submit writing, artwork and photographs.

L'Esprit du Duc: the yearbook highlights the events of the previous year to remind all graduates of their alma mater. It is mailed to all seniors after their graduation.

The Student Handbook: published annually contains information about the University which concerns the students. Copies are available at the Information Center, Third Floor, Duquesne Union.
Part V: Admission, Financial Aid, Tuition and Fees

Admission

OFFICE OF ADMISSIONS
The Office of Admissions is located on the first floor of the Administration Building.
Telephone 412-396-6020 434-6221 434-6222
Office hours Monday through Friday from 8:30 A M to 4:30 P M

POLICY
It is the policy of Duquesne University to admit applicants who are best qualified to profit from opportunities which the University offers for intellectual, social and cultural growth. In general admission is based upon past academic performance, scholastic ability and personal characteristics. Information about religious preference sex, racial characteristics and ethnic origin is not taken into consideration by the Committee on Admissions.

ADMISSION REQUIREMENTS
1. A candidate should have graduated from an approved secondary school in the upper three-fifths of the class and demonstrated exemplary personal conduct in that institution. Applicants who have not completed four years of high school must submit a High School Equivalent Diploma issued by their state department of education.

2. High school curriculum must include 16 units distributed as follows: four years in English; eight units in any combination from the area of social studies, language, mathematics and science; and four elective units for which the secondary school offers credit toward graduation. In specific instances and at the discretion of the Committee on Admissions the genuine equivalency of these requirements may be accepted in lieu of the precise requirements specified.

3. Scores in core areas must meet the standards acceptable to the University must be presented for the required College Board Scholastic Aptitude Test (SAT) or the American College Testing Program (ACT) (Note: external admission to the School of Music an audition is required.)

EARLY DECISION
Students who desire Duquesne University as their first choice for college should consider the Early Decision Plan. This plan requires that the student apply by November 15 of his/her senior year. The student is notified of the decision by December 15 and is required to send his/her non-refundable deposit within two weeks. This offers the candidate the advantage of knowing of the admissions decision early in his/her senior year.

APPLICATION—NEW FIRST-YEAR STUDENTS
Application should be addressed to the Director of Admissions, Duquesne University, Pittsburgh, Pennsylvania 15282. It may be submitted at any time during the candidate’s senior year up to July 1. The application procedure is as follows:

1. Obtain the Application for Admission with the Office of Admissions.
2. Include the $20 non-refundable application fee with the application form. International students must pay a $30 non-refundable application fee. No application will be processed for consideration by the Committee on Admissions unless accompanied by the required fee.
3. Request the secondary school principal or guidance counselor to submit a transcript of the candidate’s academic record. A recommendation is required.
4. Complete the required SAT or ACT exam and send it to the Admissions Office.
5. An interview is highly recommended for prospective students. Auditions are required for School of Music applicants.
6. Students interested in being considered for University Scholarships should submit their application by February 1 of their senior year.

Early Decision Deadline: For students who have Duquesne as their first college choice is November 15. Notification will be by December 15. If accepted under the Early Decision Plan, students are asked to submit a non-refundable tuition deposit of $1,000 within two weeks. Resident students are asked to submit a $250 non-refundable deposit.

Notification of decisions for regular admission begin once Early Decision applicants have been notified. If accepted students are asked to submit non-refundable tuition deposit of $1,000 for commit-
Persons seeking admission to the University as transfer students from a state approved college which does not have regional accreditation must have attained a cumulative average of 3.0 based on a 4.0 quality point system. In addition such prospective students must take the College Entrance Examination Board tests and attain the appropriate scores above. An interview is highly recommended for all transfer students and will be required of those students which the Admissions Office notifies personally.

TEMPORARY TRANSFERS

Temporary Transfers are students who are enrolled in another college or university who desire to take a course or courses at Duquesne for one semester.

No Temporary Transfer Student will be granted admission without formal application and an official transcript or permission from an official at the University at which the student is enrolled. A Temporary Transfer Student must receive a letter of permission to take a course or courses at Duquesne University beyond one semester.

No Temporary Transfer shall be permitted to register for more than two semesters without making arrangements to become a permanent transfer student.

SUMMER SESSION

DUQUESNE STUDENTS

Any Duquesne University undergraduate student who was granted admission to the College of Liberal Arts and Sciences at the preceding Spring Semester may register in the Summer Session Students who were dismissed by their school at the preceding Spring Semester for academic reasons may register for summer classes with permission of the Student Standing Committee on Student Standing of their school. All students must have their course selections approved by their academic advisor.

Graduates and other former students including any who withdrew from the University must obtain readmission before they may register for summer classes.

STUDENTS FROM OTHER INSTITUTIONS

A student of another college or university who wishes to enroll for the summer session and who intends thereafter to return to the original institution and is eligible to continue there may be admitted to the Summer Session. A tear out admissions application and registration form for the summer session is provided in the announcement of summer offerings which may be obtained from the Office of Admissions.

ADVANCED PLACEMENT

Students who have followed the College Entrance Examination Board college level program in secondary schools and have performed satisfactorily in the advanced placement examinations are eligible for advanced placement at Duquesne University. Credit as well as placement for achievement that merits such consideration. Subjects included in the program are English composition, history, English, modern foreign languages (French, German, Spanish). Latin, mathematics AB, mathematics BC, physics, chemistry, and French.

Credit will be given on a minimum advanced placement score determined yearly by the College of Liberal Arts and Sciences. For current information about advanced placement credits the student must consult with the University's Director of Testing Bureau or the Office of Academic Advisement: College of Liberal Arts and Sciences.

Applicants who hope to receive advanced placement credits must request that scores be sent to the University. Information about equivalent University courses for which qualifying students may receive credit may be obtained from the University's Director of Testing Bureau or the Assistant Dean for Admission College of Liberal Arts and Sciences.

COLLEGE LEVEL EXAMINATION PROGRAM

The special examinations for which the College of Liberal Arts and Sciences will award credit with acceptable scores are:

1. General Examinations: Humanities, social sciences
2. Subject Examinations: American government

Information about equivalent University courses for which qualifying students may receive credit may be obtained from the University's Director of Testing Bureau or the Office of Academic Advisement: College of Liberal Arts and Sciences.

CREDIT HOUR BANK

Duquesne University subscribes to the philosophy that no student should be denied the education of his/her choice for lack of sufficient financial resources. The Office of Student Financial Aid has been established to help students locate the most advantageous forms of assistance available to them.

Applicants who hope to receive advanced placement credits must request that scores be received for the University. Information about equivalent University courses for which qualifying students may receive credit may be obtained from the University's Director of Testing Bureau or the Office of Academic Advisement: College of Liberal Arts and Sciences.

Applicants who hope to receive advanced placement credits must request that scores be sent to the University. Information about equivalent University courses for which qualifying students may receive credit may be obtained from the University's Director of Testing Bureau or the Office of Academic Advisement: College of Liberal Arts and Sciences.

No Temporary Transfer shall be permitted to register for more than two semesters without making arrangements to become a permanent transfer student.

STUDENT SELF-HELP

As the primary beneficiary of higher education, the student is expected to accept at least partial financial responsibility for the cost. This principle is reflected in both the determination of need and the types of aid available. In determining need, consideration is given for at least a minimum contribution to cost from the student, family savings, and gifts. Two types of self-help programs of assistance are offered by Duquesne and College Scholarships. Student loans provide rates terms and conditions superior to those offered by commercial lenders. The student must accept a portion of the educational costs.

GIFT ASSISTANCE

Non-repayable scholarships are grants or are available in accordance with one or a combination of the following criteria:
1) Financial Need
2) Superior Academic Potential or Achievement
3) Special Ability which reflects proficiency in a specialized field or activity such as music, debate, athletics, etc.

MEETING STUDENT NEED

The Financial Aid Office attempts to provide aid equal to need for all student applicants. Financial aid packages consist of funds from multiple aid sources and programs those programs which are under the direct control of the University's are not usually sufficient to meet full need or provide an adequate package of educational benefits. It is expected that students who apply for assistance to the University will also apply for federal, state and other available sources of aid.

PROGRAM FUNDING

All programs of financial aid are subject to limitations of available funds. Therefore in addition to the eligibility requirements of particular programs, availability of funds determines the level of funding in the program. First consideration always goes to applicants who apply within deadline dates and who provide complete and accurate information. All programs are subject to charges of elimination or replacement. It is expected that changes in government programs are routine; hence there require periodic legislative review.

CURRENT INFORMATION

Because programs of aid and conditions of eligibility can change from time to time, the student should contact the appropriate office for current information. The high school guidance office is the University Financial Aid Office.
Students of outstanding ability and achievement who demonstrate financial need may be considered for scholarships. These awards are not based on a demonstration of need and may be renewed annually based on continued academic achievement. Renewal amounts may vary relative to the degree of achievement. The minimum academic requirement is a cumulative Quality Point Average of 3.0.

The Eleanor Potis Capone Memorial Award is available to an undergraduate student enrolled at Duquesne University who demonstrates financial need and is a full-time undergraduate student who has a cumulative Quality Point Average of 3.0. This annual award is available to a student chosen in accordance with guidelines established to honor the memory of Eleanor P. Capone, the founder of the Department of Journalism and the University's radio station, WDQ-M. It is available to a freshman entering the university in the first year with a cumulative Quality Point Average of 3.0.

The Andrew Kozora Memorial Scholarship is available to full-time undergraduate students who demonstrate financial need and are making acceptable progress toward a degree. Recipients are selected in accordance with guidelines established to honor the memory of Andrew Kozora, a senior in the business administration department at Duquesne University and who was killed in an automobile accident in 1972.

The John J. Ryan Scholarship is available to full-time undergraduate students who demonstrate financial need and are making acceptable progress toward a degree. Recipients are selected in accordance with guidelines established to honor the memory of John J. Ryan, a former Duquesne University student who was killed in an automobile accident in 1973.

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Duquesne University students planning to major in journalism, music, or administration are eligible for various scholarships. The Communication Scholarship Committee of Journalism faculty and friends will award the 1978 Journalism Award. The student must be officially registered as a freshman or a sophomore flute major in the School of Music by April 1.

The George Barrere Memorial Scholarship is awarded annually to a student of Polish ancestry who demonstrates outstanding academic promise concurrent financial need and is preparing for a journalism career in the newspaper or broadcasting fields. It is administered by the faculty of the Department of Journalism.

**SCHOOL OF BUSINESS AND ADMINISTRATION**

**ALCOSA Scholarship** This award is made annually to the undergraduate student in the School of Business and Administration. Recipients are selected by the Dean on the basis of academic achievement.

**SCHOOL OF EDUCATION**

School of Education Competitive Scholarships are available to freshmen and transfer students who among the top fifth of their high school class or who maintained a 3.0 high school average. Transfer students applying for these scholarships must have a B average from the school they last attended. Applicants are required to submit three recommendations representing the areas of academic performance and personal achievement. An interview is also required to discuss individual perceptions and ideals as well as a statement of career goals. Freshmen applicants must have an SAT score of at least 900 with a minimum of 400 on one test. Transfer applicants must be new students to Duquesne. To apply, contact the School of Education. For renewal requirements and procedures contact the Office of Financial Aid.

**Lawrence Reche Memorial Scholarship** The award will be made to a student who as a junior in the School of Education has in the judgment of the Awards Committee demonstrated a leadership character and professionalism which merit special recognition. The awardee must have a minimum Quality Point Average of 3.0 at the time of application. The student must be officially registered as a senior in the School of Education of the University at the time of receiving the award. Applications must be submitted to the Dean's office no later than March 1.

**SCHOOL OF MUSIC**

**Women's Advisory Board Scholarships** This fund provides scholarships in varying amounts each year to vocal performers. These scholarships are available to entering freshmen and upperclassmen.

**Jazz Scholarship** Available to all full-time undergraduate music students involved in the jazz program. Applications are available in the Dean's Office.

**George Barrere Memorial Scholarship** The Pittsburgh Flute Club offers a scholarship in flute memory of George Barrere, founder of the first flute club in the United States. This $100 scholarship is awarded to a freshman or a sophomore flute major.

**Polish Arts League Scholarship** This award is made annually by the Polish Arts League of Pittsburgh to an outstanding sophomore or senior student in the School of Music. Preference will be given to a student of Polish ancestry. Other students will not be excluded from consideration.

**Music School Scholarships** These awards are made by donors from individuals and organizations in appreciation of performances by School of Music students.

**University Solo Wind Scholarships** These scholarships in varying amounts are awarded only to potential First Year performers.

**University Strings Scholarships** These scholarships for tuition and applied music fees have been established by the University to promote the study of string instruments.

**Pittsburgh Flute Club Award** This award is given to an outstanding woodwind student.

**University Piano Scholarships** These scholarships are awarded to students showing outstanding talent in piano.

**SCHOOL OF NURSING**

**Brikaw Scholarship** The R. J. Behan Annual Nursing Scholarship is a $500 scholarship awarded annually to a nursing student who is in good academic standing. The award is based on need professional involvement and future aspirations.

**SCHOOL OF PHARMACY**

**Women of Galen** The Women's Auxiliary of the Galen Pharmaceutical Society of Pittsburgh annually provides scholarship funds to be awarded to deserving pharmacy students in their last years of attendance in the School of Pharmacy.

**Beaver County Pharmaceutical Association Loan Fund** This revolving loan fund provides financial assistance to students in the School of Pharmacy who are residents of Beaver County, Pennsylvania. Applications are to be made to the Dean of the School of Pharmacy.

**Samuel W. Curtis Loan Fund** This fund is intended to provide financial assistance for students in the School of Pharmacy.

**Kappa Psi Pharmaceutical Association Loan Fund** This fund is available to students in need of financial assistance. Applications are to be made directly to the Office of the Dean of the School of Pharmacy.

**Galen Pharmaceutical Society Loan Fund** This fund is available to students in need of financial assistance. Applications are to be made directly to the Office of the Dean of the School of Pharmacy.

**NARD Foundation** The National Association of Retail Druggists in honor of its executive secretary John W. Dargavel this foundation provides a $200 scholarship to a qualified student in the School of Pharmacy as well as loans to students of pharmacy in their last five semesters for payment of tuition fees and books.

**Galen Pharmaceutical Society Loan Fund** This revolving fund was established in 1963 for the purpose of providing financial assistance to worthy students of pharmacy during times of urgent financial distress.

**Fred Schiller Loan Fund** This loan fund was founded by Mr. Fred Schiller. Pittsburgh pharmacist in memory of the late Emanuel Spector for worthy and qualified students of the School of Pharmacy. This revolving fund makes available tuition loans of varying amounts depending on the applicant's need and general ability.

**McPartland Beck Scholarship Award** This fund is offered by Lambda Kappa Sigma to financially assist students who have demonstrated high academic performance and need. Emphasis will be on performance in selection of recipient. Inquiries should be directed to the Office of Financial Aid.

**McClintock Memorial Fund** is awarded to students who have demonstrated scholastic ability, good character, and volunteer service to the community. Applications are to be made directly to the Office of the Dean of Students.

**Vira I. Hort Travel Award** This fund was established to provide an educational and cultural opportunity for promising young women students. Recipients are selected on the basis of academic achievement and evidence of interest in intercultural or international relations. Inquiries should be directed to the Office of the Dean of Students.

**Nathan and Harry Daily Scholarship** This is an annual award made through the generosity of such outstanding and financial need. Interested students should apply through the Financial Aid Office.

**Elizabeth Elsie McDonough Scholarship** This award was established to assist needy students from Allegheny County to continue their educational endeavors at Duquesne University. Recipients are selected by the University and awards are based on both academic achievement and financial need.

**Hymn Family Foundation Scholarship** A gift from the Hymn Family Foundation. Awards are based on academic criteria and need. The amount of the awards varies. Recipients are selected by the Financial Aid Office.

**Mu Sigma Kappa Scholarship** This award is designed to assist needy students from Allegheny County to continue their educational endeavors at Duquesne University. Selection is made by the chairman of the grant committee.

**Kappa Psi Pharmaceutical Association Loan Fund** This fund is available to students in need of financial assistance. Applications are to be made directly to the Office of the Dean of the School of Pharmacy.

**Pharmacy Office** These scholarships are made to worthy students of pharmacy in the School of Pharmacy. Applications are to be made directly to the Office of the Dean of the School of Pharmacy.

**Elizabeth McPartland Beck Scholarship** This fund is offered by Lambda Kappa Sigma to financially assist students who have demonstrated high academic performance and need. Emphasis will be on performance in selection of recipient. Inquiries should be directed to the Office of Financial Aid.

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**Pharmacy Office** These scholarships are made to worthy students of pharmacy in the School of Pharmacy. Applications are to be made directly to the Office of the Dean of the School of Pharmacy.
established to provide scholarships for the benefit of students residing in the United States. Worthy students are recommended by the University to the Trustees of the fund with both academic and financial considerations being used. Interested students should apply through the Financial Aid Office.

Laws and Ida Amundson and Benjamin Amundson Memorial Fund. This fund was established to provide scholarships for the benefit of students who are residents of Allegheny County. Recommendations are made by the University to the Trustees of the fund. Interested students should apply through the Financial Aid Office.

I W. Rahide Memorial Scholarship Fund. A newly-established fund in honor of I W. and Ruth Lewis Rahide in recognition of their long-time affection for the City of Pittsburgh. Factors to be considered for selection for the scholarship include leadership qualities, good character, strong potential for civic contributions (especially to the City of Pittsburgh) and the ability to relate well with others. Interested students should reply through the Financial Aid Office.

Stella and Charles Gutman Scholarship Foundation. Awards are based on need with academic considerations. Interested students should apply through the Financial Aid Office.

John Joseph Mongillo Scholarship Fund. These awards are based on financial need. The fund was established through a gift to the University from Marie Locher in memory of her brother John Mongillo. Interested students should apply through the Financial Aid Office.

UNIVERSITY DISCOUNTS

Clinical Discounts. University-recognized members of the Christian and Jewish clergy and religious who have been ordained or professed are eligible to enroll in certain graduate programs at half-off the regular tuition rate. The reduced tuition benefits may be applied toward any terminal master's degree program.

The reduction does not extend to the Institute of Formation Spirituality, the Master of Liberal Studies program, doctoral degree programs or any designated special program with differential fees. Only one Duquesne degree may be obtained under this reduced tuition policy. University fees, laboratory costs, room and board and other non-tuition related expenses will be charged at full rate.

Awards

Catholic Lay Teachers Discount. Full-time teachers in Catholic schools who have completed a minimum of two years teaching at an approved diocesan school are eligible to receive a tuition discount. They must be admitted to the graduate program of their choice under the usual and standard conditions. The discount is 50 percent of tuition only. The same restrictions indicated under the section on Clerical Discounts apply.

Senior Citizen Discount. Men and women who are 60 years of age or older may also enroll in certain graduate programs at half-off the regular tuition rate. The same restrictions indicated under the section on Clerical Discounts apply.

RESERVE OFFICER TRAINING CORPS (ROTC) SCHOLARSHIPS

Army ROTC offers a number of four-year scholarships for qualified students on a very competitive basis. These scholarships pay for tuition fees, room and board and other non-tuition related expenses. Only one Duquesne degree may be obtained under this reduced tuition policy. University fees, laboratory costs, room and board and other non-tuition related expenses will be charged at full rate.

TUITION

The University reserves the rights to change tuition and fee charges if exigencies require such action. The figures shown apply to the 1982-83 term only unless otherwise indicated.

<table>
<thead>
<tr>
<th>Tuition Type</th>
<th>Rate</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Tuition</td>
<td>$160</td>
<td>for each semester hour credit</td>
</tr>
<tr>
<td>Graduate Tuition</td>
<td>$170</td>
<td>for each semester hour credit</td>
</tr>
<tr>
<td>Auditors</td>
<td>$20</td>
<td>pay the same as students taking courses for credit</td>
</tr>
<tr>
<td>Application (non-refundable)</td>
<td>$100</td>
<td>for processing each form</td>
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<tr>
<td>Matriculation Deposit (non-refundable)</td>
<td>$100</td>
<td>for processing each form</td>
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<tr>
<td>Residence Hall Pre-Payment (non-refundable)</td>
<td>$20</td>
<td>for recognition of proficiency of course credit (See policy in Section VI page 144)</td>
</tr>
<tr>
<td>Residence Hall Damage Deposit</td>
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<td></td>
</tr>
<tr>
<td>Change of Schedule</td>
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<td></td>
</tr>
<tr>
<td>Credit by Examination</td>
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</tbody>
</table>

LABORATORY FEES

All amounts are for one semester where applicable. The yearly charge is double. In addition to the laboratory fee, some programs also require a breakage charge of $15.00 a semester; this is proportionately refundable depending upon the losses incurred.


<table>
<thead>
<tr>
<th>Department</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (each laboratory)</td>
<td>$35</td>
</tr>
<tr>
<td>Business 491</td>
<td>$35</td>
</tr>
<tr>
<td>Computer Science</td>
<td>$10</td>
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<tr>
<td>Education 490 491 (Student Teaching)</td>
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</tr>
<tr>
<td>English 203 380 381 382 383 384 385</td>
<td>$35</td>
</tr>
<tr>
<td>English 439</td>
<td>$30</td>
</tr>
<tr>
<td>English as a Second Language</td>
<td>$10</td>
</tr>
<tr>
<td>Journalism 367 369 380 405 409 485</td>
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</tr>
<tr>
<td>Journalism 267 268 370 378 379 381 413</td>
<td>$25</td>
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<tr>
<td>Journalism 375</td>
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</tr>
<tr>
<td>Mathematics 307 308</td>
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</tr>
<tr>
<td>Music-Applied Music 101 102 103 104 201 202 203 204 301 302 303 304 401 402 403 404</td>
<td>$150</td>
</tr>
<tr>
<td>Music-Applied Music 111 112 118 119 211 212 218 219 311 312 411 412</td>
<td>$75</td>
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<tr>
<td>Music-Class Piano 213 214 215 315</td>
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</tr>
<tr>
<td>Music-Class Methods 181 182 183 184</td>
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<tr>
<td>Music-Bass Class Methods 281 282 283 284</td>
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<tr>
<td>Music-Organ Practice Room</td>
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<td>Music-String Class Methods 381 382</td>
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<td>Music-Student Teaching</td>
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</tr>
<tr>
<td>Pharmacy 011 012 016 017 022 027 031 032 035 054</td>
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</tr>
<tr>
<td>Physics (each laboratory)</td>
<td>$35</td>
</tr>
<tr>
<td>Psychology 356</td>
<td>$7</td>
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<tr>
<td>Speech 01 02 014 251 252 311 312 313 314 315 316</td>
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</tr>
<tr>
<td>Graduate Biology With Laboratory</td>
<td>$35</td>
</tr>
<tr>
<td>Graduate Chemistry 520 561</td>
<td>$35</td>
</tr>
<tr>
<td>Graduate Classics 551</td>
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</tr>
<tr>
<td>Graduate Communications 512</td>
<td>$25</td>
</tr>
<tr>
<td>Graduate Modern Languages 051 052</td>
<td>$10</td>
</tr>
<tr>
<td>Graduate Psychology 571</td>
<td>$35</td>
</tr>
<tr>
<td>Graduate Pharmacy (each laboratory)</td>
<td>$30</td>
</tr>
<tr>
<td>Graduate Education 512 692 693</td>
<td>$10</td>
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<td>$150</td>
</tr>
<tr>
<td>Graduate Music Minors 511 512 513 514 515</td>
<td>$75</td>
</tr>
</tbody>
</table>

**Laboratory Breakage Fee**

One breakage card per semester will cover laboratory breakage in Chemistry.

*No Academic Credit Flat Fee*
SUMMER AND SPECIAL SESSION TUITION AND FEE CHARGES

<table>
<thead>
<tr>
<th>Course</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Tuition</td>
<td>$160</td>
</tr>
<tr>
<td>Graduate Tuition</td>
<td>$170</td>
</tr>
<tr>
<td>University Fee</td>
<td>$11</td>
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GRADUATION FEES

<table>
<thead>
<tr>
<th>Degree</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor Degree</td>
<td>$30</td>
</tr>
<tr>
<td>Master Degree</td>
<td>40</td>
</tr>
<tr>
<td>Juris Doctor Degree</td>
<td>85</td>
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<tr>
<td>Doctor of Philosophy Degree</td>
<td>55</td>
</tr>
<tr>
<td>Thesis Binding Fee—Doctoral Dissertation</td>
<td>75</td>
</tr>
<tr>
<td>Thesis Binding Fee—Master Thesis</td>
<td>65</td>
</tr>
</tbody>
</table>

WITHDRAWAL AND TERMINATION OF ATTENDANCE

Upon officially withdrawing from the University, a student receives remission of part of the tuition charged for the semester or session in accordance with the Tuition Remission Schedule. The amount of the remission is added to payments and a refund is made upon request where a credit balance is created on the student's total account.

The Effective Date of Withdrawal for determining the percent of remission is that on which the appropriate Academic Dean was notified by letter of the student's decision to terminate attendance and requested official withdrawal. It is also the recorded date of the student's separation from the University and regarded as the last day of attendance. A student is considered enrolled and in attendance until the University receives notification of the student's intent to terminate attendance in conformity with this policy even though absences from classes were observed and recorded before the Effective Date of Withdrawal.

When a student's attendance is involuntarily terminated in a semester because of personal disability arising from injury or illness, any remission of tuition beyond the limits prescribed by the withdrawal refund policy is subject first to the approval of the academic dean and finally the Vice President for Academic Affairs and finally the Vice President for Business and Management.

TUITION REMISSION SCHEDULE

This schedule applies to tuition only. It does not apply to other charges such as the University Fee, course fee, and laboratory fees nor to the reduction of credits resulting from course withdrawals made after the Change of Schedule period.

<table>
<thead>
<tr>
<th>Session</th>
<th>Percent of Remission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the Semester—First Week</td>
<td>80</td>
</tr>
<tr>
<td>Second Week</td>
<td>80</td>
</tr>
<tr>
<td>Third Week</td>
<td>40</td>
</tr>
<tr>
<td>Fourth Week</td>
<td>20</td>
</tr>
<tr>
<td>After Fourth Week</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session</th>
<th>Percent of Remission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the Summer Session—First Week</td>
<td>60</td>
</tr>
<tr>
<td>Second Week</td>
<td>20</td>
</tr>
<tr>
<td>After Second Week</td>
<td>None</td>
</tr>
</tbody>
</table>

ROOM AND BOARD

The request for on-campus residence is made on the same form used for application for admission to the University. After the student has completed the admission procedure and has paid the matriculation deposit, the residency request is also subject to the approval of the Assistant Dean of Residence Life. The request is processed and necessary application forms are forwarded to the student.

The University requires that a prepayment of $100 which is applicable to the following semester's room and board account accompany all applications for room reservations or renewals. This pre-payment is non-refundable.

In addition, a $50 damage deposit must accompany each initial housing contract. This deposit is retained by the University throughout the period of residency. If damage deductions are incurred and the room key and ID card returned, the full amount of the deposit will be refunded at the final termination of residency.

Reservations are made on a semester basis—August to December, January to May. Rooms may be occupied no earlier than noon of the day preceding the beginning of the orientation or registration periods.

Room assignments are made on a first-come, first-serve basis. Therefore, it is extremely important for the student to return his/her housing application immediately upon receipt of it. Overcrowded conditions have occurred in the past and students have been temporarily assigned three to a room or in lounges. Therefore, students returning their application after all rooms have been assigned will be housed in temporary housing. If not assigned a space in the residence area, students occupying rooms in the University residence halls are required to take their meals at the Resident Dining Hall. Charges are for 20 meals a week, and meals served commencing with the evening meal of the day before the first day of classes.

Residence Halls are closed during vacation (Thanksgiving, Christmas, and Easter) periods.

The University reserves the right to modify these charges if exigencies require such action.

Regular Session—Room and Board (20 meals a week)

<table>
<thead>
<tr>
<th>Period</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>$1460</td>
</tr>
<tr>
<td>Double</td>
<td>$1910</td>
</tr>
</tbody>
</table>

Summer Session—Room and Board

<table>
<thead>
<tr>
<th>Period</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Weeks</td>
<td>$5410</td>
</tr>
<tr>
<td>8 Weeks</td>
<td>$7220</td>
</tr>
</tbody>
</table>

ROOM AND BOARD—WITHDRAWAL AND REFUND

A resident student must notify the Assistant Dean of Residence Life in advance of the planned withdrawal. No refund of room charges will be made where withdrawal occurs after the opening classes. In the event of withdrawal, board will be refunded at the rate of 75% of the balance remaining on the student's meal plan up until mid-semester. After the mid-semester point, no refund will be made. No reduction of charges nor refund of payments to which a student may have been otherwise entitled will be made if withdrawal is not in accordance with the official withdrawal procedure. No student is permitted to remain in the residence halls after academic withdrawal from the University has been completed.

FINANCIAL MATTERS

All charges for tuition, fees, room, and board less financial assistance authorized by the Financial Aid Office are payable at registration. Any subsequent charges will be billed to the student and are forwarded to the student who cashes them regardless of the University's approval.


The Student Financing Program provides financing for up to 50% of the current semester's charges less financial aid authorized and other charges to be repaid to the University in two equal installments. Interest is charged at the rate of 1% per month. A delinquency charge on each monthly installment in default for a period of ten days or more will be charged in an amount equal to 5% of such installment or $500, whichever is less except that a minimum charge of $100 may be made.

CASHING CHECKS

A student may cash a check up to a maximum of $50 at the Cashier's Office on the Ground Floor of the Administration Building between 9:00 A.M. and 4:00 P.M. Monday through Friday except during registration with a validated ID Card for the current semester.

BAD CHECKS

It is the policy of the University to charge bad checks to the student who cashes them regardless of the maker. A $30 service charge will be assessed on checks that are returned from a bank for lack of funds.
Part VI: Registration and Scholastic Policies

REGISTRATION

Students who attend the Fall Semester which begins in late August receive academic advisement and register for classes during the preceding months of April, May, June and July. Spring Semester students register in the Fall Semester during November and early December.

Orientation programs for new students are conducted by the schools in late spring and summer in conjunction with academic advisement and registration.

A comprehensive invoice that confirms the class schedule of courses for which the student is registered and lists fees, tuition, and dormitory charge deposits financial aid awards and balance due is mailed to the student at his or her permanent address a month before classes begin thus enabling the student or parent to make payment by mail.

A three-day final registration for students who have neither obtained registration for classes nor concluded financial arrangements is held just before the opening of classes.

The financial obligation for class places reserved by a registered student who does not subsequently attend cannot be canceled unless written notification of the decision not to attend is given to the Registrar before the first class day. Notification received on or after the opening day of classes is subject to the official withdrawal policy. Withdrawal from room and board reservation contracts is to be made in accordance with the provisions of the contract. See Room and Board—Withdrawal Policy, page 141 of this catalog.

OFFICIAL REGISTRATION

Only students who are recognized as officially registered are bona fide students of Duquesne University. Unless students are officially registered, they are not permitted to attend classes, engage in student affairs, or generally have access to the buildings and grounds or use of the services of the University.

Official registration is the recognition given by the University to persons who have met these conditions:

1. Appropriate authority for admittance to study in a school or department has been given by an authorized officer of the University. The admitting authority for undergraduate students resides in the Director of Admissions.

2. Authorization to continue in the program selected has been given and registration for classes has been accomplished in compliance with all academic requirements and procedures.

3. Arrangements have been made to the satisfaction of the University for payment in full of all financial charges including fees, tuition and housing charges, all of which are due and payable in full before the beginning of classes.

CHANGE OF SCHEDULE

Students requiring a change of class schedule to change class times or to add or to drop a class are permitted to do so during the pre-registration period, the final registration period, and the first class week of the semester. Change of class schedule is not permitted after the Latest Date for Change of Schedule as announced in the semester academic calendar.

All schedule changes must be approved by the academic adviser and processed with the Registrar. Schedule change requests processed with the Registrar during the first class week must also have the signatures of the student's instructors whose classes are being added or dropped.

Students who tardily process change forms are not entitled to refund for the course credits dropped. Courses dropped after the deadline for making schedule changes are classified as course withdrawals (See Withdrawal from a Course and Withdrawal from the University—mentioned elsewhere in this catalog).

Except for changes requested by the dean or adviser, a fee of $2.00 is charged for each change form processed after the close of pre-registration.

CROSS-REGISTRATION

Cross-college and university registration provides opportunities for enriched educational programs, approved by a student's adviser or dean at any of the following institutions:

Carlow College
Carnegie-Mellon University
Chatham College
Community College of Allegheny County

La Roche College
Pittsburgh Theological Seminary
Point Park College
Robert Morris College
University of Pittsburgh

The opportunity for cross-registration will be available to each full-time student enrolled in any program leading to a degree. Full credit and grade will be transferred.

Each college or university accepts registration in regularly accredited courses designated by it as open to cross-registration. First priority in registration shall go to the students of the host college. The student is also charged for the course in accordance with the provisions of the contract. See Withdrawal from a Course and Withdrawal from the University—mentioned elsewhere in this catalog.

Duquesne University students who are participating in this program are charged tuition and University fees in accordance with the University's facilities and rates charged by Duquesne University. However, students are responsible for paying any course or laboratory fees to the host institution.

These policies on cross-registration are not effective at this time for enrollments in summer sessions including the spring term at the University of Pittsburgh.

LATE REGISTRATION

With approval of the appropriate dean and upon payment of the penalty fee, late registration may be permitted for a serious reason. However, no student may be registered and begin attending classes later than the Latest Date for Registration and Change of Schedule as announced in the Academic Calendar.

RECORDS AND REPORTS

SEASON GRADE REPORTS

Every registered student who is free of financial obligations to the University is sent a report of grades to the permanent address on record soon after the close of each semester.

TRANSCRIPTS

Each student receives a summary transcript of his one or complete academic record at the close of each academic year. Students should carefully examine their records for accuracy and immediately report errors to the Registrar.

To obtain additional copies of their academic records, students must write to the Registrar for transcripts for themselves or for other institutions and agencies. All official transcripts issued by the Office of the Registrar bear the signature of the Registrar and the embossed seal of the Office of the Registrar. Whenever an official transcript is released directly to the student it will also bear the stamped designation Issued to Student.

No transcript will be issued unless all financial obligations of the student to the University have been fulfilled. A fee of $2.00 is charged for the issuance of each transcript.

CONFIDENTIALITY OF STUDENT RECORDS

The University regards the student's personal information and academic record as a matter of confidentiality between the student and the University. The contents of either may be revealed only in accordance with the Family Educational Rights and Privacy Act of 1974 (Public Law 93-380—Section 438 as amended) and the Internal Revenue Code of 1954 or the child must grant a waiver of rights given by FERPA.

Students wishing to waive the requirement of FERPA relating to the release of academic information to parents must complete the waiver obtainable at the office of the academic adviser.

Academic Policies

POLICIES

ACADEMIC ADVISOR

Every student attending the University is assigned or selects an academic advisor. It is the student's responsibility to ascertain the advisor's name which may be obtained from the office of the school in which the student is enrolled.

The student should consult with the academic advisor about academic programs and any questions of an academic nature. No student may register without the academic advisor's approval and signature.

ACADEMIC SUPERVISOR OF INTERCOLLEGIATE ATHLETICS

The academic progress of student athletes engaged in intercollegiate competition is monitored by the Director of Intercollegiate Athletics. The delivery of academic support systems to those student athletes who need them is facilitated via this office.

AUDITING COURSES

Regularly enrolled Duquesne students are permitted to audit courses in addition to degree students from the general community who would like to audit courses for personal enrichment and who are not matriculated nor pursuing a degree program are also eligible to audit. Regular students should consult their academic advisor for details on auditing. Non-degree students should contact the Office of Continuing Education to complete a brief application form. Admission is granted on a space available basis by the Office of the Registrar and the individual student. Fees for auditing are uniform for all students and are determined by the Division of Continuing Education and the Registrar.

Registration in a course as an auditor must be declared at registration and is irreversible after the last date for change of schedule each semester as indicated in the University Calendar (page 27).

Records will show Audit in the grade space on the transcript of a regularly matriculated student. A Certificate of Attendance for non-degree students will be awarded by the Division of Continuing Education. Audited courses are not eligible to be converted to University official transcript or academic record.
maturesd credits. Courses audited may not be challenged later or completed via CLEP or other advanced standing tests.

Courses eligible for auditing are determined by the individual colleges and schools of the university. A partial list of school policies follows: courses audited for the most current listings are published in the School of Law's available for audits. 1) No clinical courses in the School of Nursing and Pharmacy can be audited. 2) In the College of Liberal Arts and Sciences courses in the humanities and social sciences can be audited, but communications and science laboratory courses may not be audited.

Students enrolling for audit may attend lectures, complete course readings, and, at the discretion of the professor in charge of the course, may participate in class or exams.

CANCELLATION OF COURSES

The university makes every reasonable effort to offer courses as announced in the Semester Schedule of Courses and the Summer Session Bulletin. It reserves the right, however, to make changes or cancel courses in the academic schedule because of insufficient enrollment or for any other equally valid reason.

CLASS ATTENDANCE

Regular class attendance is normally essential for maximum educational advantage and is strongly encouraged. The responsibility for all course material rests wholly with the student. Students may require attendance at every class. It is the prerogative of each school to establish policy for attendance at classes, laboratories, tests, examinations, deadlines for reports, and specific school requirements. It is the instructor's responsibility to make the school's policy known at the first class session as it pertains to the course and school.

The student who is unable to attend class because of serious illness, hospitalization, a serious accident or other extenuating circumstance is responsible for notifying the office of his academic dean. He should supply the necessary written verification as soon as possible.

The student must submit the work assigned and take the examination in the course at the specified time. If the work is not submitted or an examination is not taken at the scheduled time, the policy is to assign a zero for that part of the course. An accumulation of zero grades could result in a final grade of F. If a student has for significant reasons missed a part of the course or examination period, the grade may be submitted as an I. If the temporary grade is I, the student must be replaced by a passing grade. The student must be completed by the time stated in the Academic Calendar. Failure on the part of the student to remove the temporary grade results in conversion of that grade to an F recorded on the transcript.

CLASSIFICATION OF STUDENTS

Freshmen: less than 30 credits completed
Sophomore: 30 to 59 credits completed
Junior: 60 to 89 credits completed
Senior: 90 or more credits completed

1. Full-time Student: A student taking an academic load of at least 12 credits considered a full-time student. With this status, a student is entitled to the benefits of various activities. A student may not change status during the semester without the permission of the academic advisor and the Dean of the student's school.

2. Part-time Student: Anyone who carries under 12 credits is regarded as a part-time student.

3. Postgraduate Student: A person who has completed a baccalaureate degree and is seeking additional undergraduate credits.

COURSE EXAMINATIONS

Unit examinations are given on the dates announced by the instructor at the beginning of each semester. Grades for these are obtained from the instructor at the end of each semester and summer session. No student is excused from taking the final examination.

CREDIT BY EXAMINATION

Examinations for recognition of proficiency in a subject or for course credit as authorized by the College or a particular School of the university are available to currently enrolled students who have previous experience or exposure have acquired mastery of the knowledge in certain courses. An application fee of $20.00 is charged for each course. Application forms may be obtained from the Office of the Registrar.

As policies vary among the Schools, students who feel they may qualify for credit by examination should consult the Dean of the school in which they are enrolled for specific information about courses open to this examination procedure.

GRADING SYSTEM

The officially recognized method of grading coursework work and rating academic performance of students at the university is as follows:

A — Excellent
B — Good
C — Average
D — Below average passing
P — Pass (Used in some courses where graded is inappropriate. Indicates that the completion of course work with credit earned but without quality points is independent of the quality point system.)
S — Satisfactory (used in pass/fail courses and is independent of the quality point system)
F — Failure (Course must be repeated for credit)
U — Unsatisfactory — Failure (used in pass/fail elected courses and is independent of the quality point system, course must be repeated for credit)
I — Incomplete (A temporary grade given by an instructor when neither a passing nor failing grade can be determined because of incomplete course work. Unless a cogent explanation of extenuating circumstances is accepted, the instructor will present the missed examination or required assignment is made up by the date specified in the academic calendar. The I becomes a permanent F grade.)
W — Official withdrawal (used on a student's permanent record to indicate termination of attendance in courses under conditions of official withdrawal. See pages 232 and 220. Withdrawal from a Course and Withdrawal from the University)

QUALITY POINT SYSTEM

The student's overall academic quality point average (OPA) is obtained by dividing the total quality points earned by the total number of semester hours attempted. These quality point values of grades are used for each credit attempted:

A — four points
B — three points
C — two points
D — one point
F — zero points

Courses in which grades P, S, U, and W were given are not used in calculating the quality point average.

REPEATING COURSES AND COURSE RETROGRADATION

Students ordinarily are permitted to repeat courses in which D and F grades were received. The request for permission to repeat a course is to be submitted in letter form to the academic advisor before registering in the repeat course. All grades are retained on the permanent academic record. The result of the final attempt in a repeated course is however the student's status in the course with regard to attempted credits earned and the completion of requirements.

Retrogradation is a corollary of the repeat credit rule under which a student may earn credit once only for a course prescribed that a student may not move backward from an advanced course to a lower level course. All grade and course credit for both any doubtful situation must be decided by the department chairperson or dean involved.

PASS/FAIL ELECTIVES

One course a semester is elected by a junior or senior and approved by the academic advisor as providing an opportunity to expand and enrich the student's experience. It may be taken on a pass/fail (S-U) basis. If passed, the credits will count for graduation but neither grade nor credits will be calculated in the quality point average.

Once a course has been identified as a pass/fail elective, the course must be completed as such and the grade submitted must be an S or a U. No required course may be taken on this elective pass/fail basis.

The decision to elect the pass/fail option must be made during registration or no later than the close of the period provided for making schedule changes.

STUDENT STANDING

Progress toward a degree is measured by the cumulative quality point average. The scholastic records of students who fail to meet the minimum requirements set by the faculty of each college or school will be submitted to the college or school committee on student standing for review and appropriate action. Normally academic records will be reviewed annually at the conclusion of each academic year.

The policy of the Academic Dean's on Student Affairs as a part of academic standards reads as follows:

a) To participate in the formal athletic programs at the University, a student must be currently enrolled as a full-time student. Full-time status is defined by University catalog as enrollment of 12 credits minimum per semester. Such a program would allow a student to graduate within five years.

b) A student athlete must be making satisfactory academic progress. This means that a student must have successfully completed 24 credits during the previous academic year. This would allow a student the fall, spring, and summer semesters in which to earn these 24 credits. In addition, the student athlete must maintain satisfactory academic standing as outlined in the Student Handbook and University catalogs.

c) A student athlete (as all students in the University) is academically dismissed if the student athlete fails three courses in any semester. Student athletes can be readmitted by the student standing committee of the College or school to which the student athlete is returning. If a student transfers to another school within the University, the student athlete can be admitted only by the Dean of that school.

For students who have attempted 15-30 credits or more than 30 credits in one year, the guidelines are:

Academic Warning: 1.75 to 1.99 OPA (Letter of warning may be sent by appropriate Dean)
Probation I: 1.50 to 1.74 OPA (Subject to the jurisdiction of the appropriate committee on Student Standing and may be required to modify or restrict academic programs).
Dismissal: Less than 1.50 OPA (Readmission may be permitted on recommendation of the appropriate committee on Student Standing).

For students who have attempted 31-60 credits or who have attempted up to 61 credits within four semesters, these guidelines prevail:

Academic Warning: 1.85 to 1.99 OPA (Letter of warning may be sent by appropriate Dean)
Probation I: 1.50 to 1.84 OPA (Subject to the jurisdiction of the appropriate committee on Student Standing and may be required to modify or restrict academic programs).
Dismissal: Less than 1.50 OPA (Readmission may be permitted on recommendation of the appropriate committee on Student Standing).
3 The last year's work in a minimum of 30 semester hours of credit must be completed in residence at the University.

4 Students who have earned more than three credits or one course in theology are required for all undergraduate Catholic students in every program at the University.

5 Students on academic probation may be candidates for graduation only with permission of the Committee on Student Standing of their school.

To achieve distinction of being named to the Dean's List, Qualified seniors may be permitted to register in certain undergraduate courses with unusual distinction and who have completed the regular course with unusual distinction and who have completed a minimum of 60 credits in residence. Honors are based on these standards:

Cum Laude—Quality Point Average 3.50 to 3.74
Magna Cum Laude—Quality Point Average 3.75 and above
Summa Cum Laude—Upon recommendation of the faculty and a 3.90 OPA, the magna cum laude citation may be raised to summa cum laude.

UNIT OF CREDIT

The unit of credit is the semester hour; i.e., one credit equals one semester hour. One semester hour of credit is granted for the successful completion of one hour of a week of lecture or recitation or at least two hours a week of laboratory work for one semester course for 15 weeks.

TRANSFER WITHIN THE UNIVERSITY

It would be to the student's advantage to discuss the proposed transfer with the academic advisor of the new school no later than two weeks prior to preregistration. The advisor will then use the form and procedure established as uniform for the University to effect any change.

WITHDRAWAL FROM A COURSE

First semester freshmen may withdraw from courses with the approval of their advisor up to the period of final examinations and receive a grade of W by processing the proper form.

If a student other than a first semester freshman wishes to withdraw from a course he may do so with the approval of his academic advisor and by processing the proper form up to the date announced in the Academic Calendar for withdrawal with a W grade.

If a student wishes to withdraw from a course after the date announced in the Academic Calendar for withdrawal with a W grade, the student must seek approval of the Committee on Student Standing of the student's school. The student will be notified of the Committee's decision. If approval is granted the student then initiates the appropriate form through the advisor.

A student who is not granted approval of the request and withdraws from the course unofficially will receive an F grade for the course.

GRADUATE COURSES FOR UNDERGRADUATE CREDIT

Authorized to register with the approval of the advisor, and with the recommendation of the dean of the graduate school involved. All 500-level courses are described in the graduate school catalogs.

GRADUATION REQUIREMENTS

The candidate for a University degree must be a person of good moral character who has satisfactorily completed all academic requirements for the degree program and in addition has the recommendation of the appropriate Academic Dean filed the Application for the University Degree with the Office of the Registrar on or before the latest date to apply for graduation as announced in the Academic Calendar and paid all indebtedness to the University.

It is the student's responsibility to determine that the courses taken in each semester are sequentially correct and necessary for the degree program.

The student must periodically review in consultation with the appropriate academic advisor progress toward graduation, and seek in consultation with the advisor the resolution of any question about fulfillment of graduation requirements.

Each school and each department sets forth in this catalog requirements for graduation which the student is expected to know as well as the aforementioned general requirements and the following:

1. The bachelor's degree requires a minimum of 120 semester hours of credit in all except Radiological Health, Medical Technology, and Pharmacy which require respectively 123, 125, and 160 credits.

2. All bachelor's degrees require an overall minimum quality point average of 2.0 which is a C grade average in a 4.0 system. (Students should further determine the necessary minimum OPA requirements in their major science courses etc.)

3. The last year's work in a minimum of 30 semester hours of credit must be completed in residence at the University.

4. Students who have earned more than three credits or one course in theology are required for all undergraduate Catholic students in every program at the University.

5. Students on academic probation may be candidates for graduation only with permission of the Committee on Student Standing of their school.

The candidate who has satisfied graduation requirements by a Challenge Examination (credit by examination) when taken timely within the last 30 semester hours of study for the degree will fulfill the residence requirement provided a minimum of 30 semester hours of credit has been earned in course work at the University in the last year's study.

HONORS

Degrees are awarded with special mention cum laude magna cum laude or summa cum laude to students who have completed the regular course with unusual distinction and who have completed a minimum of 60 credits in residence. Honors are based on these standards:

Cum Laude—Quality Point Average 3.50 to 3.74
Magn Cum Laude—Quality Point Average 3.75 and above
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B S M E M M Duquesne University

Benjamin Speigel
Teacher of Bassoon
Former Member Pittsburgh Symphony
Ann Labousky Steele
Associate Professor of Organ
Chairman of Performance Department and
Head of Organ and Sacred Music Faculty
B M Eastman School of Music
M M University of Michigan

Diploma (Mention Maximum) Schola Cantorum Paris
Diploma (Mention Maximum) Ecole Normale Paris

Gladys Stein
Associate Professor of Piano and
Head of Piano Faculty
Diploma B S M Juilliard
School of Music

Special Artist Degree Vienna State Academy

Phyllis Susen
Teacher of Harp
Former Member Pittsburgh Symphony
Rev Moshe Taube
Teacher of Voice
Diploma Juilliard School of Music

David P Teisser
Teacher of Flute
B A Houston Baptist College
M M Duquesne University
Thomas D Thompson
Teacher of Clarinet
B M E American Conservatory
M M Northwestern University
Member Pittsburgh Symphony

Gerald Unger
Teacher of Percussion
B S B M Ohio State University
M A University of Northern Colorado
Member Pittsburgh Symphony

Sandra Stailey Vaporetti
Teacher of Voice

Wendy Webb
Teacher of Flute
B S M E Duquesne University
M F A Carnegie-Mellon University

Jean Wilmouth
Teacher of Percussion
B F A Carnegie-Mellon University
John H Wilson
Associate Professor of Music
Education and Head of Jazz Faculty
B S M A Ed D New York University

Samuel C Yahres
Associate Professor of Music Education
Chairman Department of Music Education
and Coordinator of Student Teachers
B S M Ed Indiana University of Pennsylvania
M Ed University of Pittsburgh
SCHOOL OF NURSING
ADMINISTRATION
Joanne White M N Ed
M Kathleen Winter R N
Vivian Lauer Kuzas M S Ed

FACULTY
Catherine Arenz R N
Instructor in Nursing
B S N Seton Hall University
M N Ed University of Pittsburgh
Irene Dittemore R N
Associate Professor of Nursing
B S N Vanderbuilt University
M Litt Ph D University of Pittsburgh
Mary Lou Ende R N
Assistant Professor of Nursing
B S N Duquesne University
M N Ed University of Pittsburgh
Eileen Gimper R N
Assistant Professor of Nursing
B S N Duquesne University
M N University of Pittsburgh
(Doctoral Student University of Pittsburgh)
Mary M Hansen R N
Associate Professor of Nursing
B S N E University of Pittsburgh
M S N University of Maryland
(Doctor Student University of Pittsburgh)
Rebecca Hartman R N
Instructor in Nursing
B S N Duquesne University
M N Ed University of Pittsburgh
Gladys L Huston R N
Associate Professor of Nursing
B S N E University of Pittsburgh
B S N University of Virginia
(Doctoral Student University of Pittsburgh)

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Associate Professor of Nursing
B S N Duquesne University
M N Ed University of Pittsburgh
Salvatore A Palazzolo R N
Instructor in Nursing
B A State University College Brockport
M S N University of Arizona
Natalie Pavlovich R N
Professor of Nursing
B S N University of Arizona
M A M S N Ph D University of Michigan

Helen T Pranzatelli R N
Associate Professor of Nursing
B S N Duquesne University
Ph D University of Pittsburgh
Carol Sue Reitz R N
Assistant Professor in Nursing
B S N Emory University
M N Ed Ph D University of Pittsburgh
Joanne Tate R N
Assistant Professor in Nursing
B S N Point Park College
M S N Duquesne University
M N Ed University of Pittsburgh
(Doctoral Student University of Pittsburgh)
Shirley Y Wheeler R N
Associate Professor of Nursing
B S N M N Ed University of Pittsburgh
Evelyn W Wilczynski R N
Associate Professor of Nursing
B S N M Ed Duquesne University
M Kathleen Winter R N
Associate Professor of Nursing
B S N Duquesne University
M P H Ph D University of Pittsburgh
Karen Zamberlan R N
Instructor in Nursing
B S N East Tenn State Univ
M S N West Virginia University
(Doctoral Student University of Pittsburgh)
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